

Hat Ranch Project

SCH# 2013112049

Draft Environmental Impact Report

Volume I of II (Chapters 1-8 & Appendices A & B)

Prepared for
the City of Manteca



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Prepared by



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Hat Ranch Project Draft Environmental Impact Report

SCH# 2013112049

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1. INTRODUCTION

1. INTRODUCTION

1.1 INTRODUCTION

The Hat Ranch Project (proposed project) Draft Environmental Impact Report (EIR) has been prepared in accordance with the California Environmental Quality Act of 1970, Public Resources Code Sections 21000-21178, as amended (CEQA), and the Guidelines for Implementation of the California Environmental Quality Act, California Code of Regulations Title 14, Sections 15000-15387 (CEQA Guidelines). The City of Manteca is the lead agency for the environmental review of the proposed project evaluated herein and has the principal responsibility for approving the project. As required by Section 15121 of the CEQA Guidelines, this Draft EIR will (a) inform public agency decision-makers and the public of the significant environmental effects of the project; (b) identify possible ways to minimize the significant adverse environmental effects; and (c) describe reasonable and feasible project alternatives that would reduce environmental effects. The public agency shall consider the information in the Draft EIR along with other information that may be presented to the agency.

1.2 PROJECT DESCRIPTION

The proposed project's location, setting, and a summary of the proposed project is described in further detail below. Full details of the proposed project are included within Chapter 3, Project Description, of this EIR.

Project Location and Setting

The project site is comprised of three parcels totaling approximately 184.7 acres located in a currently unincorporated area of San Joaquin County, southeast of the City of Manteca limits, south of State Route (SR) 120, and west of SR 99. The project site is identified by Assessor's Parcel Numbers (APNs) 226-120-100, 226-120,110 (collectively the "West Parcel"), and 226-140-04 (the "East Parcel"). The West Parcel is planted with vineyards. The East Parcel is planted with vineyards and contains a large barn, an office structure, a tree-lined driveway, and a 20,000-square-foot (sf) residence in the middle of the project site.

The City limits currently make up the project's western, northern, and eastern boundaries, while unincorporated agricultural land borders the project site to the south. SR 99 is located approximately 1.5 miles northeast of the project site. Upon buildout of the project site, the project site would be bordered by the future Antone Raymus Parkway to the south and the future Atherton Drive to the east.

The project site is currently designated as Urban Reserve-Low Density Residential (UR-LDR), Park (P), and Commercial Mixed Use (CMU) by the City of Manteca 2023 General Plan and as Agricultural-Urban Reserve (A/UR) by the San Joaquin County General Plan. Land surrounding the project site to the north, west, and east is currently designated by the City of Manteca 2023 General Plan as Low Density Residential (LDR). Orchards are located east of the site. Land to the south is designated by the City as UR-LDR.



Proposed Project Summary

The proposed project would include a master planned residential community of up to 738 dwelling units, two neighborhood parks, and a 16.1-acre elementary/middle school located on a project site of approximately 184.7 acres. The proposed project would include the development of 634 traditional single-family detached homes and a unique district of 104 “half-plex” units.

The Tentative Map would be comprised of the proposed residences across both the East Parcel and West Parcel. The East Parcel includes 407 residential lots on 102.9 acres of land, resulting in a density of 3.96 dwelling units per acre (du/ac). Of the 407 lots, approximately 343 would be constructed as single-family residences and the remaining 64 units would be constructed as half-plex units. In addition, the East Parcel allocates 9.3 acres to parkland located directly adjacent to a proposed 16.1-acre elementary/middle school. The West Parcel would include 331 residential lots on 81.8 acres of land, resulting in a density of 4.05 du/ac. Of the 331 lots, 291 would be constructed as single-family residences, while 40 would be half-plex units. The West Parcel would also contain 6.9 acres of parkland and upland play area along the northern boundary of the project site.

The existing 20,000-sf residence on the East Parcel would be demolished and replaced with single-family lots consistent with the proposed development. The proposed project would require detachment from the Lathrop-Manteca Fire District and Ripon Consolidated Fire District, as well as detachment from the San Joaquin County Resource Conservation District (RCD).

The City of Manteca has discretionary authority and is the lead agency for the proposed project. The proposed project requires approval of the following entitlements from the City of Manteca:

- Approval of an Annexation for the overall 184.7-acre project site and detachment from the Lathrop-Manteca Fire District and Ripon Consolidated Fire District, as well as detachment from the San Joaquin County RCD;
- General Plan Amendment from UR-LDR and CMU to LDR, Public/Quasi-Public (PQP), and an on-site relocation of and an increase in the P designation;
- Prezone of the 184.7-acre site to Planned Development Low Density Residential (PD-R-1), Planned Development Park (PD-Park), and Public Quasi Public (PQP);
- Approval of a Tentative Map;
- Approval of a Development Agreement; and
- Approval of Design Review Guidelines.

1.3 PURPOSE OF THE EIR

As provided in the CEQA Guidelines Section 15021, public agencies are charged with the duty to avoid or minimize environmental damage where feasible. The public agency has an obligation to balance a variety of public objectives, including economic, environmental, and social issues.

CEQA requires the preparation of an EIR prior to approving any project that may have a significant effect on the environment. For the purposes of CEQA, the term *project* refers to the whole of an action that has the potential for resulting in a direct physical change or a reasonably foreseeable indirect physical change in the environment (CEQA Guidelines Section 15378[a]). With respect to the proposed project, the City has determined that the proposed development is a *project under CEQA* that has the potential for resulting in significant environmental effects within the definition of CEQA.



The EIR is an informational document that appraises decision makers and the general public of the potential significant environmental effects of a proposed project. An EIR must describe a reasonable range of feasible alternatives to the project and identify possible means to minimize the significant effects. The lead agency, which is the City of Manteca for this project, is required to consider the information in the EIR along with any other available information in deciding whether to approve or deny the application. The basic requirements for an EIR include discussions of the environmental setting, environmental impacts, mitigation measures, alternatives, growth inducing impacts, and cumulative impacts.

It should be noted that because the project site would require annexation to the City, this Draft EIR would also be utilized by the San Joaquin Local Agency Formation Commission (LAFCo) as a responsible agency during their review of the annexation and detachment application.

1.4 EIR PROCESS

The EIR process begins with the decision by the lead agency to prepare an EIR, either during a preliminary review of a project or at the conclusion of an Initial Study. Once the decision is made to prepare an EIR, the lead agency sends a Notice of Preparation (NOP) to appropriate government agencies and, when required, to the State Clearinghouse (SCH) in the Office of Planning and Research (OPR), which will ensure that responsible State agencies reply within the required time. The SCH assigns an identification number to the project, which then becomes the identification number for all subsequent environmental documents on the project. Applicable agencies have 30 days to respond to the NOP, indicating, at a minimum, reasonable alternatives and mitigation measures they wish to have explored in the Draft EIR and whether the agency will be a responsible agency or a trustee agency for the project. An NOP (see Appendix A) was prepared for the proposed project and was circulated from January 22, 2021 to February 23, 2021. A public scoping was held on February 10, 2021 for the purpose of informing the public and receiving comments on the scope of the environmental analysis to be prepared for the proposed project.

As soon as the Draft EIR is completed, a notice of completion is filed with the SCH and a public notice is published to inform interested parties that a Draft EIR is available for agency and/or public review. In addition, the notice provides information regarding the location of drafts and any public meetings or hearings that are scheduled. The Draft EIR is circulated for a period of 45 days, during which time reviewers may make comments. The lead agency must evaluate and respond to comments in writing, describing the disposition of any significant environmental issues raised and explaining in detail the reasons for not accepting any specific comments concerning major environmental issues. If comments received after public notice is given result in the addition of significant new information to an EIR, the revised EIR or affected chapters must be recirculated for an additional public review period with related comments and responses.

Once the lead agency is satisfied that the EIR has adequately addressed the pertinent issues in compliance with CEQA, a Final EIR will be prepared. The Final EIR is made available for review by the public or commenting agencies. Before approving a project, the lead agency shall certify that the Final EIR has been completed in compliance with CEQA, and that the Final EIR has been presented to the decision-making body of the lead agency, which has reviewed and considered the EIR. The lead agency shall also certify that the Final EIR reflects the lead agency's independent judgment and analysis.



The findings of fact prepared by the lead agency must be based on substantial evidence in the administrative record and must include an explanation that bridges the gap between evidence in the record and the conclusions required by CEQA. If the decision-making body elects to proceed with a project that would have unavoidable significant impacts, then a Statement of Overriding Considerations explaining the decision to balance the benefits of the project against unavoidable environmental impacts must be prepared.

1.5 SCOPE OF THE DRAFT EIR

State CEQA Guidelines Section 15126.2(a) states, in pertinent part:

An EIR shall identify and focus on the significant environmental effects of the proposed project. In assessing the impact of a proposed project on the environment, the lead agency should normally limit its examination to changes in the existing physical conditions in the affected area as they exist at the time the notice of preparation is published, or where no notice of preparation is published, at the time environmental analysis is commenced.

Pursuant to these guidelines, the scope of this Draft EIR addresses specific issues and concerns identified as potentially significant. The City determined, in conjunction with comments received on the NOP, that the following issues will be addressed in the Draft EIR:

- Aesthetics;
- Agricultural Resources;
- Air Quality, Greenhouse Gas Emissions, and Energy;
- Biological Resources;
- Cultural and Tribal Cultural Resources;
- Geology, Soils, and Mineral Resources;
- Hazards and Hazardous Materials (including Wildfire);
- Hydrology and Water Quality;
- Land Use and Planning/Population and Housing;
- Noise;
- Public Services, Utilities, and Service Systems (including Recreation); and
- Transportation.

The evaluation of effects is presented on a resource-by-resource basis in Chapters 4.1 through 4.12 of the Draft EIR. Each technical chapter is divided into four sections: Introduction, Environmental Setting, Regulatory Setting, and Impacts and Mitigation Measures.

Impacts that are determined to be significant in Chapter 4, and for which feasible mitigation measures are not available to reduce those impacts to a less-than-significant level, are identified as *significant and unavoidable*. Chapter 6 of the Draft EIR presents a discussion and comprehensive list of all significant and unavoidable impacts identified in Chapter 4.

1.6 COMMENTS RECEIVED ON THE NOP

The City of Manteca received 20 comment letters and emails (see Appendix B) during the open comment period on the NOP and verbal comments at the NOP scoping meeting for the proposed project. The letters were authored by the following representatives of State and local agencies as well as local residents:



Agency Comments

- Department of Toxic Substances Control – Gavin McCreary;
- California Department of Conservation – Monique Wilber;
- Native American Heritage Commission – Nancy Gonzalez-Lopez; and
- Central Valley Regional Water Quality Control Board – Nicholas White.

Public Comments

- Individual – Anthony and Kristin Salinas;
- Individual – Billy;
- Individual – Catherine Quintana;
- Individual – Cindy Weese;
- Individual – David and Jackie Rashe;
- Individual – Doug and Michelle Smith;
- Individual – Eric Darville;
- Individual – Eva Chong-Castro;
- Individual – Greg Miculinich;
- Individual – Jodi Beaty (two letters);
- Individual – Jose and Maria Carreiro;
- Individual – Ken Harvey;
- Individual – Linda Jo Bruton;
- Individual – Renee Reed; and
- Individual – Tim Barker.

The following list, categorized by issue, summarizes the written and verbal concerns and identifies where in the Draft EIR the comments are addressed. All of the issues below are addressed in this Draft EIR, in the relevant chapters identified in the first column.

<u>Aesthetics</u> (Chapter 4.1)	Concerns related to: <ul style="list-style-type: none">• Proposed two-story homes adjacent to single-story homes would reduce the visible horizon from the existing structures as well as impact the amount of sunlight, privacy, and security.• Impacts to the existing single-family residential aesthetic from the proposed two-story homes and half-plex units.• Project impacts related to shading.• Aesthetic impacts from construction waste.
<u>Agricultural Resources</u> (Chapter 4.2)	Concerns related to: <ul style="list-style-type: none">• Conversion of agricultural land to urban uses.• The use of permanent agricultural conservation easements as partial compensation for the loss of agricultural land.• Incremental agricultural impacts leading to cumulative impacts.
<u>Air Quality, GHG Emissions, and Energy</u> (Chapter 4.3)	Concerns related to: <ul style="list-style-type: none">• Air quality impacts related to increased dust, dirt, and traffic emissions from the operation and construction of proposed project.• Solar panels on proposed residences.
<u>Biological Resources</u> (Chapter 4.4)	Concerns related to: <ul style="list-style-type: none">• Wildlife that the proposed project would displace.



<p><u>Cultural and Tribal Cultural Resources</u> (Chapter 4.5)</p>	<p>Concerns related to:</p> <ul style="list-style-type: none"> • Appropriate analysis of cultural and tribal cultural resources. • Consultation with California Native American tribes that are traditionally and culturally affiliated with the area of the proposed project. • The demolition of the 20,000-sf residence within the project site.
<p><u>Hazards and Hazardous Materials (including Wildfire)</u> (Chapter 4.7)</p>	<p>Concerns related to:</p> <ul style="list-style-type: none"> • The potential for historic or future activities on or near the project site to result in the release of hazardous wastes/substances, contaminated soils within the project site, and proper investigation of agricultural pesticide use within the project site. • Any sites within or near the project area that have been used for mining activities. • Presence of hazardous materials within buildings or structures that are to be demolished on the project site. • Impacts related to fire safety.
<p><u>Hydrology and Water Quality</u> (Chapter 4.8)</p>	<p>Concerns related to:</p> <ul style="list-style-type: none"> • Providing adequate water quality and water supply to the proposed project. • Aging infrastructure, such as levees, that protect the City from flooding. • Wastewater discharge compliance with the Antidegradation Policy and the Antidegradation Implementation Policy within the Central Valley Water Board Basin Plan. • Coverage under the Construction Storm Water General Permit. • Coverage under Phase I and Phase II Municipal Separate Storm Sewer System Permits. • Coverage under the National Pollutant Discharge Elimination System (NPDES) permit. • Coverage under Dewatering Permits.
<p><u>Land Use and Planning/Population and Housing</u> (Chapter 4.9)</p>	<p>Concerns related to:</p> <ul style="list-style-type: none"> • Land use compatibility (i.e., proposed small lots adjacent to existing larger lots) and lack of buffer zone (i.e., green space, bike path, wall, etc.) between smaller lots and existing larger lots. • Population growth resulting in overcrowding. • Influx of students to nearby schools. • Consistency with zoning requirements and Municipal Code regarding development standards. • Inclusionary affordable housing. • Role of the San Joaquin County RCD in regard to reviewing the project proposal. • Approval of annexation from the San Joaquin LAFCo and detachment from the San Joaquin County RCD, Lathrop-Manteca Fire District, and the Ripon Consolidated Fire District.
<p><u>Noise</u> (Chapter 4.10)</p>	<p>Concerns related to:</p> <ul style="list-style-type: none"> • Permanent increase in ambient noise from the proposed homes, traffic, and elementary school. • Temporary increase in ambient noise from the proposed construction.
<p><u>Public Services, Recreation, Utilities, and Service Systems</u> (Chapter 4.11)</p>	<p>Concerns related to:</p> <ul style="list-style-type: none"> • Adequate police services for the project site. • Adequate fire protection for the current and future residents. • Wastewater services, such as treatment and capacity. • Water supply (capacity and conveyance).



	<ul style="list-style-type: none"> • Adequate flow of water for fire protection. • Impacts to storm drainage infrastructure. • Manteca's infrastructure capacity and service levels, specifically water services.
Transportation (Chapter 4.12)	<p>Concerns related to:</p> <ul style="list-style-type: none"> • Public safety impacts from cumulative traffic and roadway conditions (i.e., pot holes). • Emergency vehicle access along Pillsbury Road. • Compact and linear design of streets within the proposed project could lead to speeding. • Traffic impacts to the proposed school. • Cumulative traffic impacts on Pillsbury Road, Woodward, Moffat, Polk Street, Veramonte Road, Buena Vista Road, Heartland, Tannehill, and Mono Road. • Increased traffic and speeding on the above-mentioned roadways. • Pillsbury Road and Buena Vista Road turning into through streets. • Traffic signals at the intersections of Pillsbury Road and Woodward Road as well as Atherton Road and Woodward Road. • Safety concerns regarding presence of semi-trucks along Moffat Road. • Traffic congestion entering and exiting SR 99 and SR 120. • Impact of railroad lines for the ingress and egress from the new neighborhood and the existing neighborhood, increased traffic from the new train schedule, and increased traffic congestion related to railroad/roadway intersection. • Construction vehicle impacts such as increased dust and increased trash on surrounding roadways. • Pedestrian and bicycle circulation surrounding the proposed project. • Adequate street and school parking. • Adequate parking structures for the proposed half-plex units.

1.7 ORGANIZATION OF THE DRAFT EIR

The Hat Ranch Draft EIR is organized into the following chapters:

Chapter 1 – Introduction

Provides an introduction and overview describing the intended use of the Draft EIR and the review and certification process, as well as summaries of the chapters included in the Draft EIR and summaries of the issues and concerns received from the public and public agencies during the NOP review period.

Chapter 2 – Executive Summary

Summarizes the elements of the project and the environmental impacts that would result from implementation of the proposed project, describes proposed mitigation measures, and indicates the level of significance of impacts after mitigation. Acknowledges alternatives that would reduce or avoid significant impacts.

Chapter 3 – Project Description

Provides a detailed description of the proposed project, including the project's location, background information, major objectives, and technical characteristics.



Chapter 4 – Existing Environmental Setting, Impacts, and Mitigation

Contains a project-level and cumulative analysis of environmental issue areas associated with the proposed project. Each environmental issue chapter contains an introduction and description of the project setting, identifies impacts, and recommends appropriate mitigation measures, if needed.

Chapter 5 – Alternatives

Describes the alternatives to the proposed project, their respective environmental effects, and a determination of the environmentally superior alternative.

Chapter 6 – Statutorily Required Sections

Provides discussions required by CEQA regarding impacts that would result from the proposed project, including a summary of cumulative impacts, potential growth-inducing impacts, significant and unavoidable impacts, and significant irreversible changes to the environment.

Chapter 7 – References

Provides bibliographic information for all references and resources cited.

Chapter 8 – EIR Authors and Persons Consulted

Lists the Draft EIR and technical report authors who provided technical assistance in the preparation and review of the Draft EIR.

Appendices

Includes the NOP, comments received during the NOP comment period, and all technical reports prepared for the proposed project.



2. EXECUTIVE SUMMARY

2. EXECUTIVE SUMMARY

2.1 INTRODUCTION

The Executive Summary chapter of the EIR provides an overview of the proposed project (see Chapter 3, Project Description, for further details) and provides a table summary of the conclusions of the environmental analysis provided in Chapters 4.1 through 4.12. This chapter also summarizes the alternatives to the proposed project that are described in Chapter 5, Alternatives Analysis, and identifies the Environmentally Superior Alternative. Table 2-1 contains the environmental impacts associated with the proposed project, the significance of the impacts, the proposed mitigation measures for the impacts, and the significance of the impacts after implementation of the mitigation measures.

2.2 SUMMARY DESCRIPTION OF THE PROPOSED PROJECT

The project site consists of three parcels totaling approximately 184.7 acres and is located in a currently unincorporated area of San Joaquin County, southeast of the City of Manteca limits, south of State Route (SR) 120 and west of SR 99. The City of Manteca limits currently make up the project's western, northern, and eastern boundaries. The site is located within the 20-year Planning Horizon of Manteca's existing Sphere of Influence (SOI) and is identified as San Joaquin County Assessor's Parcel Numbers (APNs) 226-120-10, -11, and 226-140-04.

Currently, the project site is planted with vineyards and contains a large barn, an office structure, a tree-lined driveway, and a 20,000-square-foot (sf) residence. The site is currently designated Urban Reserve-Low Density Family Residential (UR-LDR), Park (P), and Commercial Mixed Use (CMU) by the City of Manteca General Plan. The San Joaquin County General Plan designates the site as Agriculture-Urban Reserve (A/UR). It should be noted that, per the Preferred Land Use Map in the City's Draft General Plan Update dated February 2019, future land use designations for the project site are anticipated to consist of approximately 152.4 acres of Low-Density Residential (LDR) land, 16.1 acres of Public/Quasi-Public (PQP) land, and 16.2 acres of Park (P) land.

The proposed project would include a master planned residential community of up to 738 dwelling units, two neighborhood parks, and a 16.1-acre elementary/middle school located on a project site of approximately 184.7 acres. The proposed project would include the development of 634 traditional single-family detached homes and a unique district of 104 "half-plex" units.

The East Parcel would include 407 residential lots on 102.9 acres of land, resulting in a density of 3.96 dwelling units per acre (du/ac). Of the 407 lots, approximately 343 would be constructed as single-family residences and the remaining 64 units would be constructed as half-plex units. In addition, the East Parcel would allocate 9.3 acres to parkland located directly adjacent to a proposed 16.1-acre elementary/middle school. The West Parcel would include 331 residential lots on 81.8 acres of land, resulting in a density of 4.05 du/ac. Of the 331 lots, 291 would be constructed as single-family residences, while 40 would be half-plex units. The West Parcel would also contain 6.9 acres of parkland and upland play area along the northern boundary of the project site.



The existing 20,000-sf residence on the East Parcel would be demolished and replaced with single-family lots consistent with the proposed development. The proposed project would require detachment from the Lathrop-Manteca Fire District and Ripon Consolidated Fire District, as well as detachment from the San Joaquin County Resource Conservation District (RCD).

The City of Manteca has discretionary authority and is the lead agency for the proposed project. The proposed project requires approval of the following entitlements by the City of Manteca:

- Approval of an Annexation for the overall 184.7-acre project site and detachment from the Lathrop-Manteca Fire District and Ripon Consolidated Fire District, as well as detachment from the San Joaquin County RCD;
- General Plan Amendment from UR-LDR and CMU to LDR, PQP, and an on-site relocation of and an increase in the P designation;
- Prezone of the 184.7-acre site to PD-R-1; PD-Park, and PQP;
- Approval of a Tentative Map;
- Approval of a Development Agreement; and
- Approval of Design Review Guidelines.

The proposed project would require the following additional City of Manteca approvals:

- Approval of a Grading Permit; and
- Approval of Building Permits.

A number of other agencies in addition to the City of Manteca will serve as Responsible and Trustee Agencies, pursuant to CEQA Guidelines Section 15381 and Section 15386, respectively. This EIR will provide environmental information to these agencies and other public agencies, which may be required to grant approvals or coordinate with other agencies, as part of project implementation. These agencies could include, but would not be limited to, the following:

- San Joaquin County – A demolition permit approved by San Joaquin County would be required in order to demolish the existing 20,000-sf residence located east of Pillsbury Road, if the residence is demolished prior to annexation.
- San Joaquin Local Agency Formation Commission (LAFCo) – Upon City approval of an Annexation Resolution, authorizing the applicants to submit formal annexation applications to San Joaquin LAFCo, the annexation of the 184.7-acre site would require San Joaquin LAFCo approval. In addition, as the proposed project would be served by the Manteca Fire Department upon formal annexation, detachment from both the Lathrop-Manteca Fire District (for the West Parcel) and Ripon Consolidated Fire District (for the East Parcel) would require approval by San Joaquin LAFCo. Finally, detachment from the San Joaquin County RCD would require approval by the San Joaquin
- California Department of Transportation (Caltrans) – Coordination with and/or permits from Caltrans may be required.
- Regional Water Quality Control Board (RWQCB) – Per Section 402 National Pollutant Discharge Elimination System (NPDES) permit compliance, any project that disturbs more than 10,000 sf of land is required to obtain a permit for stormwater discharge under the NPDES program administered by the RWQCB. The proposed project would be required to obtain coverage under the program for construction phase and post-construction phase stormwater discharge and would be required to develop a Stormwater Pollution Prevention Plan (SWPPP).



- San Joaquin Council of Governments – The City of Manteca is a signatory to the San Joaquin County Multi-Species Habitat Conservation and Open Space Plan (SJMSCP), and typically requires all areas within the city limits to participate in the SJMSCP. Therefore, upon annexation of the proposed project to the City, the City would also require the project site to seek coverage under the SJMSCP. The San Joaquin Council of Governments would be required to process, review and approve requests to annex to the SJMSCP from the proposed project.

Please refer to Chapter 3, Project Description, of this EIR for a detailed description of the proposed project and entitlements, as well as a full list of the project objectives.

2.3 ENVIRONMENTAL IMPACTS AND PROPOSED AND RECOMMENDED MITIGATION

Under CEQA, a significant effect on the environment is defined as a substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the project, including land, air, water, mineral, flora, fauna, ambient noise, and objects of historic or aesthetic significance. Mitigation measures must be implemented as part of the proposed project to reduce potential adverse impacts to a less-than-significant level. Such mitigation measures are noted in this EIR and are found in the following technical chapters: Aesthetics; Agricultural Resources; Air Quality, Greenhouse Gas Emissions, and Energy; Biological Resources; Cultural and Tribal Cultural Resources; Geology, Soils, and Mineral Resources; Hazards and Hazardous Materials; Hydrology and Water Quality; Noise; and Transportation. Any impact that remains significant after implementation of mitigation measures is considered a significant and unavoidable impact.

A summary of the identified impacts in the technical chapters of the EIR is presented in Table 2-1. In Table 2-1, the proposed project impacts are identified for each technical chapter (Chapter 4.1 through 4.12) of the EIR. In addition, Table 2-1 includes the level of significance of each impact, any mitigation measures required for each impact, and the resulting level of significance after implementation of mitigation measures for each impact.

2.4 SUMMARY OF PROJECT ALTERNATIVES

The following section presents a summary of the evaluation of the alternatives considered for the proposed project, which include the following:

- No Project (No Build) Alternative;
- Reduced Density Alternative; and
- Agricultural Character Alternative.

The following summary provides brief descriptions of the three alternatives to the proposed project that are evaluated in this EIR. For a more thorough discussion of project alternatives, please refer to Chapter 5, Alternatives Analysis.

No Project (No Build) Alternative

The No Project (No Build) Alternative assumes that the project site would remain in its current condition, as described above. The No Project (No Build) Alternative would result in fewer impacts related to all issue areas as compared to the proposed project; however, the Alternative would not meet any of the identified project objectives.



Reduced Density Alternative

The Reduced Density Alternative would consist of buildout of the project site with standard R-1 lots on 168.6 acres, as well as 16.2 acres of parkland. The standard R-1 lots would be built out at a maximum density of 2.1 dwelling units per acre (du/ac) for a total of 354 residential units. As such, the Reduced Density Alternative would result in the development approximately 384 less units than the proposed project. In addition, the 16.1 acres of Public/Quasi-Public land would not be included as part of the Reduced Density Alternative. Nonetheless, the Reduced Density Alternative would still require approval of an Annexation, a General Plan Amendment, Prezone, a Tentative Map, a Development Agreement, and approval of Design Review Guidelines, similar to the proposed project. The Reduced Density Alternative would also require on- and off-site roadway and utility improvements, similar to the improvements considered for the proposed project.

The Reduced Density Alternative would result in fewer impacts to Air Quality, GHG Emissions, and Energy; Noise; Public Services, Recreation, Utilities, and Service Systems; and Transportation; as compared to the proposed project. However, the Alternative would result in similar impacts related to Aesthetics; Agricultural Resources; Biological Resources; Cultural and Tribal Cultural Resources; Geology, Soils, and Mineral Resources; Hazards and Hazardous Materials; Hydrology and Water Quality; and Land Use and Planning/Population and Housing, as compared to the proposed project.

The Reduced Density Alternative would not achieve Objectives #1, #2, #3, or #5. However, the Alternative could potentially meet Objectives #4, #6, #7, and #8, albeit to a lesser extent as compared to the proposed project, as the reduction of units would not affect the Alternative's ability to achieve the goals of the remaining objectives.

Agricultural Character Alternative

The Agricultural Character Alternative would consist of buildout of the western half of the project site as proposed under project conditions, while the eastern half of the site, which includes the existing vineyards, large barn, office structure, tree-lined driveway, and 20,000-sf residence, would remain as is. The Agricultural Character Alternative would develop 291 single-family residential units, as well as 40 half-plex units for a total of 331 residential units. In addition, a total of 6.9 acres of parkland would be developed under the Alternative. As such, the Agricultural Character Alternative would result in the development of approximately 407 less residential units, and approximately 9.3 acres of parkland less than the proposed project. In addition, the 16.1 acres of Public/Quasi-Public land proposed under project conditions would not be included as part of the Alternative.

The Agricultural Character Alternative would still require approval of an Annexation, a General Plan Amendment, Prezone, a Tentative Map, Development Agreement, and approval of Design Review Guidelines, similar to the proposed project. On- and off-site roadway and utility improvements would still be required under the Agricultural Character Alternative, similar to the improvements considered for the proposed project.

The Agricultural Character Alternative would result in fewer impacts related to all issue areas as compared to the proposed project. The Agricultural Character Alternative would not achieve Objectives #1, #2, #3, or #5. However, the Alternative could potentially meet Objectives #4, #6, #7, and #8, albeit to a lesser extent as compared to the proposed project, as the reduction of units would not affect the Alternative's ability to achieve the goals of the remaining objectives.



Environmentally Superior Alternative

An EIR is required to identify the environmentally superior alternative from among the range of reasonable alternatives that are evaluated. Section 15126(e)(2) of the CEQA Guidelines requires that an environmentally superior alternative be designated and states, “If the environmentally superior alternative is the ‘no project’ alternative, the EIR shall also identify an environmentally superior alternative among the other alternatives.” The No Project (No Build) Alternative would be considered the environmentally superior alternative, because the project site is assumed to remain in its current condition under the alternative. Consequently, the impacts resulting from the proposed project would not occur under the Alternative.

Based on the analysis presented in Chapter 5, Alternatives Analysis, of this EIR, the Agricultural Character Alternative would generally meet, albeit to a lesser extent as compared to the proposed project, Objectives #4, #6, #7, and #8, and would result fewer impacts related to all issue areas as compared to the proposed project. Therefore, the Agricultural Character Alternative would be the Environmentally Superior Alternative.

2.5 AREAS OF CONTROVERSY

Areas of controversy that were identified in NOP comment letters, and are otherwise known for the region, include the following:

- Aesthetic impacts related to the reduction of visible horizon and shading.
- The conversion of agricultural land to urban uses.
- Construction and operational emissions of criteria pollutants and/or GHG emissions.
- Loss of plant and wildlife habitat.
- Potential impacts related to the inadvertent discovery of cultural, historical, or tribal resources at the project site.
- Demolition of the existing residence on-site.
- The potential for historic or future activities on or near the project site to result in the release of hazardous wastes/substances, contaminated soils within the project site, and proper investigation of agricultural pesticide use within the project site.
- Impacts related to fire safety.
- Increased stormwater runoff causing soil erosion.
- Degradation of water quality in area waterways.
- Land use compatibility issues.
- Increase in population.
- Increase in ambient noise levels on surrounding residential areas.
- Potential increase in emergency response times.
- Potential increase in demand for utilities.
- Potential need to relocate and/or remove any electrical infrastructure.
- Increased traffic in the project vicinity.
- Cumulative traffic impacts on the local and regional transportation system.



**Table 2-1
Summary of Impacts and Mitigation Measures**

Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation
4.1 Aesthetics			
4.1-1 Have a substantial adverse effect on a scenic vista.	LS	<i>None required.</i>	N/A
4.1-2 Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a State scenic highway	LS	<i>None required.</i>	N/A
4.1-3 In a non-urbanized area, 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) or, in an urbanized area, conflict with applicable zoning and other regulations governing scenic quality.	LS	<i>None required.</i>	N/A
4.1-4 Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area.	LS	<i>None required.</i>	N/A
4.1-5 Long-term changes in visual character associated with cumulative development of the proposed project in combination with future buildout of the City of	LCC	<i>None required.</i>	N/A

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**Table 2-1
Summary of Impacts and Mitigation Measures**

Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation
Manteca General Plan Study Area.			
4.1-6 Creation of new sources of light or glare associated with cumulative development of the proposed project in combination with future buildout of the City of Manteca General Plan Study Area.	LS	<i>None required.</i>	N/A
4.2 Agricultural Resources			
4.2-1 Impacts related to the conversion of Prime Farmland, Unique Farmland, or Farmland of Statewide Importance Farmland to non-agricultural use.	S	4.2-1 <i>Implement Mitigation Measure 4.4-1.</i>	SU
4.2-2 Impacts related to conflicts with existing zoning for agricultural uses or Williamson Act contracts.	LS	<i>None required.</i>	N/A
4.2-3 Impacts related to compliance with the policies of San Joaquin LAFCo pertaining to the conversion of agricultural land.	S	4.2-3 <i>Implement Mitigation Measure 4.4-1.</i>	SU
4.2-4 Impacts related to cumulative loss of agricultural land.	LS	<i>None required.</i>	N/A
4.3 Air Quality, Greenhouse Gas Emissions, and Energy			
4.3-1 Conflict with or obstruct implementation of the applicable air quality plan during project construction.	LS	<i>None required.</i>	N/A

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**Table 2-1
Summary of Impacts and Mitigation Measures**

Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation
4.3-2 Conflict with or obstruct implementation of the applicable air quality plan during project operation.	LS	<i>None required.</i>	N/A
4.3-3 Expose sensitive receptors to substantial pollutant concentrations.	LS	<i>None required.</i>	N/A
4.3-4 Result in other emissions (such as those leading to odors) affecting a substantial number of people.	LS	<i>None required.</i>	N/A
4.3-5 Result in the inefficient or wasteful use of energy associated with construction, or conflict with or obstruct a State or local plan for renewable energy or energy efficiency.	LS	<i>None required.</i>	N/A
4.3-6 Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in non-attainment under an applicable federal or State ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors).	LS	<i>None required.</i>	N/A
4.3-7 Generate GHG emissions, either directly or indirectly, that may	S	4.3-7 <i>Implement Mitigation Measure 4.3-8.</i>	SU

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**Table 2-1
Summary of Impacts and Mitigation Measures**

Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation
have a significant impact on the environment.			
4.3-8 Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs.	S	<p>4.3-8 Prior to issuance of any grading or building permits, Project Building Plans shall demonstrate compliance with the following applicable measures included in the City's Climate Action Plan, to the satisfaction of the City of Manteca Development Services Department:</p> <ul style="list-style-type: none"> • Provide proof (through calculations or other) that the proposed project would exceed current Title 24 Energy Efficiency Standards by 10 percent. If the project design cannot meet this requirement, the project applicant shall coordinate with the City to determine alternative options (e.g., exterior lighting, water savings, etc.); and • Provide proof (through calculations, notation on project plans, or other) that the proposed project shall implement a recycling or waste diversion program sufficient to exceed the State recycling and diversion targets by at least 10 percent. 	LCC
4.4 Biological Resources			
4.4-1 Have a substantial adverse effect, either directly (e.g., threaten to eliminate a plant or animal community) or through habitat modifications, on any plant or wildlife species identified	S	4.4-1 Prior to commencement of any grading activities, the Project proponent shall seek coverage under the SJMSCP to mitigate for habitat impacts to covered special status species. Coverage involves compensation for habitat impacts on covered species through implementation of Incidental Take	LS

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**Table 2-1
Summary of Impacts and Mitigation Measures**

Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation
as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the CDFW or USFWS.		<i>and Minimization Measures (ITMMs) and payment of fees for conversion of lands that may provide habitat for covered special status species. These fees are used to preserve and/or create habitat in preserves to be managed in perpetuity. Obtaining coverage for a Project includes incidental take authorization (permits) under the Endangered Species Act Section 10(a), California Fish and Game Code Section 2081, and the MBTA. Coverage under the SJMSCP would fully mitigate all habitat impacts on covered special-status species.</i>	
4.4-2 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 CDFW or USFWS.	LS	<i>None required.</i>	N/A
4.4-3 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.	LS	<i>None required.</i>	N/A
4.4-4 Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory	LS	<i>None required.</i>	N/A

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**Table 2-1
Summary of Impacts and Mitigation Measures**

Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation
wildlife corridors, or impede the use of native wildlife nursery sites.			
4.4-5 Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.	LS	<i>None required.</i>	N/A
4.4-6 Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.	S	4.4-6 <i>Implement Mitigation Measure 4.4-1.</i>	LS
4.4-7 Cumulative loss of biological resources and the effects of ongoing urbanization in the region.	LS	<i>None required.</i>	N/A
4.5 Cultural and Tribal Cultural Resources			
4.5-1 Cause a substantial adverse change in the significance of a historic architectural resource pursuant to Section 15064.5.	LS	<i>None required.</i>	N/A
4.5-2 Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5 or disturb any human remains, including those interred outside of formal cemeteries.	S	4.5-2(a) <i>If potentially significant archaeological resources are encountered during subsurface excavation activities, all construction activities within a 100-foot radius of the resource shall cease until a qualified archaeologist determines whether the resource requires further study. The City shall require that the applicant include a standard inadvertent discovery clause in every construction contract to inform</i>	LS

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**Table 2-1
Summary of Impacts and Mitigation Measures**

Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation
		<p>contractors of this requirement. Any previously undiscovered resources found during construction shall be recorded on appropriate Department of Parks and Recreation forms and evaluated for significance in terms of California Environmental Quality Act criteria by a qualified archaeologist. Potentially significant cultural resources consist of but are not limited to stone, bone, fossils, wood, or shell artifacts or features, including hearths, structural remains, or historic dump sites. If the resource is determined to be significant under CEQA, the City and a qualified archaeologist shall determine whether preservation in place is feasible. Such preservation in place is the preferred mitigation. If such preservation is infeasible, the qualified archaeologist shall prepare and implement a research design and archaeological data recovery plan for the resource. The archaeologist shall also conduct appropriate technical analyses, prepare a comprehensive written report and file it with the appropriate information center (California Historical Resources Information System), and provide for the permanent curation of the recovered materials.</p> <p>4.5-2(b) If previously unknown human remains are encountered during construction activities, Section 7050.5 of the California Health and Safety Code applies, and the following procedures shall be followed: In the event of an accidental discovery or recognition of any human remains, Public Resource</p>	

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**Table 2-1
Summary of Impacts and Mitigation Measures**

Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation
		<p><i>Code Section 5097.98 must be followed. Once project-related ground disturbance begins and if there is accidental discovery of human remains, the following steps shall be taken:</i></p> <ul style="list-style-type: none"> <i>There shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent human remains until the San Joaquin County Coroner's Office is contacted to determine if the remains are Native American and if an investigation into cause of death is required. If the coroner determines the remains are Native American, the coroner shall contact the NAHC within 24 hours, and the NAHC shall identify the person or persons it believes to be the "most likely descendant" of the deceased Native American. The most likely descendant may make recommendations to the landowner or the person responsible for the excavation work, for means of treating or disposing of, with appropriate dignity, the human remains and any associated grave goods as provided in Public Resources Code Section 5097.98.</i> 	
4.5-3 Cause a substantial adverse change in the significance of a Tribal Cultural Resource as defined in PRC, Section 21074, 5020.1 or 5024.	S	4.5-3 Implement Mitigation Measures 4.5-2(a) and 4.5-2(b).	LS

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**Table 2-1
Summary of Impacts and Mitigation Measures**

Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation
4.5-4 Contribute incrementally in conjunction with cumulative development in the City of Manteca and its sphere of influence to the regional loss of tribal cultural, historical, and/or archeological resources in San Joaquin County.	S	4.5-3 Implement Mitigation Measures 4.5-2(a) and 4.5-2(b).	LS
4.6 Geology, Soils, and Mineral Resources			
4.6-1 The proposed project could cause potential substantial adverse effects, including the risk of loss, injury, or death involving rupture of a known earthquake fault, strong seismic ground shaking, seismic-related ground failure, including liquefaction, and landslides.	S	4.6-1(a) Prior to approval of improvement plans for the project, the applicant shall submit to the Engineering Division, for review and approval, a design-level geotechnical engineering report that is produced by a California Registered Geotechnical Engineer and addresses the findings and recommendations of the geotechnical studies prepared for the proposed project. The design-level geotechnical report shall evaluate site soil conditions using a subsurface field investigation program consisting of both soil borings using Standard Penetration Test (SPT) sampling and Cone Penetration Tests (CPT). The report shall address and make recommendations on the following aspects of the project: <ul style="list-style-type: none"> • Road, pavement, and parking area design; • Structural foundations, including retaining wall design (if applicable); • Grading practices; • Erosion/winterization; 	LS

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**Table 2-1
Summary of Impacts and Mitigation Measures**

Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation
		<ul style="list-style-type: none"> • <i>Special problems discovered on-site, (i.e., groundwater, expansive/unstable soils, etc.);</i> • <i>Slope stability (if applicable to any required trenching activities);</i> • <i>Estimates related to ground-shaking intensity, seismic settlement, and liquefaction potential; and</i> • <i>Site-specific geotechnical design parameters for development (allowable bearing capacity, subsidence/settlement analysis, etc.)</i> <p><i>The recommendations on the aforementioned aspects shall ensure that if implemented, all identified potential project impacts would be reduced to less-than-significant levels. All recommendations set forth in the design-level geotechnical engineering report shall be implemented into the final improvement plans for the proposed project, which shall be subject to review and approval by the City Engineer.</i></p> <p>4.6-1(b) <i>All grading and foundation plans shall be reviewed and approved by the Engineering Division and the Building Safety Division, respectively, prior to issuance of building permits to ensure that all geotechnical recommendations specified in the geotechnical report(s) are properly incorporated and utilized in the design and reduce all identified potential project impacts to a less-than-significant level.</i></p>	

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**Table 2-1
Summary of Impacts and Mitigation Measures**

Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation
4.6-2 The project could be located on a geological unit or soil that is unstable, or that could become unstable as a result of the project, and potentially result in on or off-site lateral spreading, subsidence, liquefaction, or collapse, or be located on expansive soil, as defined in Table 18-1B of the Uniform Building Code.	S	4.6-2 Implement Mitigation Measure 4.6-1(a) and Mitigation Measure 4.6-1(b).	LS
4.6-3 The project could directly or indirectly harm or destroy a unique paleontological resource or site or unique geologic feature.	S	4.6-3 Prior to grading permit issuance, the applicant shall submit plans to the City of Manteca Community Development Department for review and approval which indicate (via notation on the improvement plans) that if construction or grading activities result in the discovery of unique paleontological resources, all work within 100 feet of the discovery shall cease immediately. The applicant shall notify the City of Manteca Community Development Department, and the resources shall be examined by a qualified paleontologist at the applicant's expense, for the purpose of recording, protecting, or curating the discovery as appropriate. The paleontologist shall submit to the Community Development Department for review and approval a report of the findings and method of curation or protection of the resources. Work may only resume in the area of discovery when the preceding work has occurred.	LS

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**Table 2-1
Summary of Impacts and Mitigation Measures**

Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation
4.6-4 Cumulative impacts to geology and soils, mineral resources, and paleontological resources.	LS	<i>None required.</i>	N/A
4.7 Hazards and Hazardous Materials			
4.7-1 Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials.	LS	<i>None required.</i>	N/A
4.7-2 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.	S	<p>4.7-2(a) <i>Prior to Improvement Plan approval, the project applicant shall hire a qualified geotechnical engineer to identify the location of any groundwater wells in the East Parcel. If groundwater wells are not found, further mitigation is not required. If groundwater wells are identified within the East Parcel, the project applicant shall hire a licensed well contractor to obtain a well abandonment permit from the SJCEHD for all on-site wells in the parcel, and properly abandon the on-site wells, pursuant to Department of Water Resources Bulletin 74-81 (Water Well Standards, Part III) for review and approval by the SJCEHD.</i></p> <p>4.7-2(b) <i>Prior to Improvement Plan approval, the project applicant shall hire a qualified geotechnical engineer to identify the location of any septic systems in the East Parcel. If septic systems are not found, further mitigation is not required. If septic systems are identified in the East Parcel, the project applicant shall hire a licensed contractor to abandon any on-</i></p>	LS

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**Table 2-1
Summary of Impacts and Mitigation Measures**

Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation
		<i>site septic system in compliance with applicable SJCEHD standards. Verification of abandonment shall be ensured by the SJCEHD.</i>	
4.7-3 Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school or be located on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, create a significant hazard to the public or environment.	LS	<i>None required.</i>	N/A
4.7-4 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.	NI	<i>None required.</i>	N/A
4.7-5 Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan, expose people or structures, either directly or	LS	<i>None required.</i>	N/A

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**Table 2-1
Summary of Impacts and Mitigation Measures**

Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation
indirectly, to a significant risk of loss, injury or death involving wildland fires, or result in a significant impact related to being located in a State Responsibility Area or land classified as a very high fire hazard severity zone.			
4.7-6 Increase the number of people who could be exposed to potential hazards associated with potentially contaminated soil and groundwater and an increase in the transport, storage, and use of hazardous materials through the development of the proposed project, combined with future buildout in the City.	LS	<i>None required.</i>	N/A
4.8 Hydrology and Water Quality			
4.8-1 Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality.	S	<p>4.8-1(a) Stormwater Pollution Prevention Plan – Project Construction</p> <p><i>Prior to issuance of grading permits, the project applicant shall prepare and submit to the City Public Works Department and Central Valley RWQCB a Storm Water Pollution Prevention Plan (SWPPP) detailing measures to control soil erosion and waste discharges during construction. The SWPPP shall include an erosion control and restoration plan, a water quality monitoring plan, a hazardous materials</i></p>	LS

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**Table 2-1
Summary of Impacts and Mitigation Measures**

Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation
		<p><i>management plan, and post-construction BMPs. The BMPs shall be maintained until all areas disturbed during construction have been adequately stabilized.</i></p> <p><i>Prior to commencement of construction activities (as they are phased), including grading, the project applicant shall submit a Notice of Intent (NOI) to the SWRCB for coverage under the General Construction Permit. Specific BMPS shall be determined during the final states of project design. However, the SWPPP shall include specific practices to minimize the potential that pollutants will leave the site during construction. Such practices include, but are not limited to, establishing designated equipment staging and washing areas, protecting spoils and soil stockpile areas, and identifying equipment exclusion zones.</i></p> <p>4.8-1(b) <i>Water Quality BMPs – Project Operation</i></p> <p><i>Prior to the City's approval of final improvement plans, the applicant shall submit a master drainage plan, subject to the review and approval by the City Engineer. This plan shall address the following requirements:</i></p> <ul style="list-style-type: none"> <i>Calculations of pre-development runoff conditions and post-development runoff scenarios, using appropriate engineering</i> 	

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**Table 2-1
Summary of Impacts and Mitigation Measures**

Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation
		<p>methods, to evaluate potential changes to runoff through specific design criteria and account for increased surface runoff;</p> <ul style="list-style-type: none"> Assessment of existing drainage facilities within the project area and an inventory of necessary upgrades, replacements, redesigns, and rehabilitation; List all BMPs for water quality protection, source control, and treatment control, which shall be developed in accordance with the Multi-Agency Post-Construction Stormwater Standards Manual; A proposed maintenance program for the on-site drainage system; and Phasing standards for drainage systems to be installed on a project- and parcel-specific basis. <p>Drainage systems, including any detention basin(s), shall be designed in accordance with the City's and other applicable flood control design criteria. As a performance standard, measures to be implemented from the master drainage plan shall provide for no net increase in peak stormwater discharge relative to current conditions, ensure that 10-year flooding events and their potential impacts are maintained at or below current levels, and ensure that people and structures are not exposed to additional flood risk.</p>	

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**Table 2-1
Summary of Impacts and Mitigation Measures**

Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation
		<i>Prior to issuing a grading permit for any/each phase of the project, the City shall require the project applicant to demonstrate that the portion of the project subject to the grading permit is consistent with the recommendations and conclusions of the master drainage plan and shall implement the measures identified in the plan. If the plan does not adequately address the drainage impacts of the specific development, the City shall require the applicant to prepare additional analysis and incorporate measures consistent with the scope and performance standards associated with the plan to ensure that drainage and flooding impacts are avoided.</i>	
4.8-2 Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin.	LS	None required.	N/A
4.8-3 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 result in substantial erosion or siltation on- or off-site or create or	S	4.8-3 Implement Mitigation Measure 4.8-1(a) and 4.8-1(b).	LS

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**Table 2-1
Summary of Impacts and Mitigation Measures**

Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation
contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff.			
4.8-4 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 substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site or impede or redirect flood flows.	LS	<i>None required.</i>	N/A
4.8-5 In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation.	LS	<i>None required.</i>	N/A
4.8-6 Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan.	LS	<i>None required.</i>	N/A
4.8-7 Cumulative impacts related to the violation of water quality standards or waste discharge requirements, groundwater	LS	<i>None required.</i>	N/A

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**Table 2-1
Summary of Impacts and Mitigation Measures**

Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation
quality, management, and recharge, and impacts resulting from the alteration of existing drainage patterns.			
4.9 Land Use and Planning/Population and Housing			
4.9-1 Cause a significant environmental impact due to physically dividing an established community.	LS	<i>None required.</i>	N/A
4.9-2 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.	LS	<i>None required.</i>	N/A
4.9-3 Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (e.g., through projects in an undeveloped area or extension of major infrastructure).	LS	<i>None required.</i>	N/A
4.9-4 Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere.	LS	<i>None required.</i>	N/A
4.9-5 Cause a significant cumulative environmental impact due to a	LS	<i>None required.</i>	N/A

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**Table 2-1
Summary of Impacts and Mitigation Measures**

Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation
conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect.			
4.9-6 Cause a significant cumulative environmental impact due to cumulative unplanned population growth.	LS	<i>None required.</i>	N/A
4.10 Noise			
4.10-1 Generation of a substantial temporary 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.	S	<p>4.10-1(a) <i>Noise-generating construction activities associated with the proposed project shall only occur within the hours identified in City of Manteca Municipal Code Section 17.58.050. The above language shall be included on final project improvement plans, grading plans and building plans prior to approval by the City of Manteca Community Development Department.</i></p> <p>4.10-1(b) <i>To the maximum extent practical, as determined by the City of Manteca Community Development Department, the following measures shall be implemented during project construction:</i></p> <ul style="list-style-type: none"> <i>All noise-producing project equipment and vehicles using internal-combustion engines shall be equipped with manufacturers-recommended mufflers and be maintained in good working condition;</i> 	LS

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**Table 2-1
Summary of Impacts and Mitigation Measures**

Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation
		<ul style="list-style-type: none"> • All mobile or fixed noise-producing equipment used on the project site that are regulated for noise output by a federal, State, or local agency shall comply with such regulations while in the course of project construction; • Electrically powered equipment shall be used instead of pneumatic or internal-combustion-powered equipment, where feasible; • Material stockpiles and mobile equipment staging, parking, and maintenance areas shall be located as far as practicable from noise-sensitive receptors; • Project area and site access road speed limits shall be established and enforced during the construction period; and • Nearby residences shall be notified of construction schedules so that arrangements can be made, if desired, to limit their exposure to short-term increases in ambient noise levels. <p>The above requirements shall be included via notation on project grading plans, subject to review and approval by the City of Manteca Community Development Department.</p>	

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**Table 2-1
Summary of Impacts and Mitigation Measures**

Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation
4.10-2 Generation of a substantial permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies.	S	4.10-2 Prior to the approval of improvement plans, the improvement plans shall show a six-foot-tall traffic noise barrier, which shall be subject to review and approval by the City of Manteca Community Development Department, which would ensure traffic noise levels from the road are reduced to the normally acceptable 60 dB Ldn standard at the first-floor backyard of residences along Antone Raymus Parkway. The noise barriers shall take the form of a masonry wall, earthen berm, or combination of the two. Other materials may be acceptable, and shall be reviewed by an acoustical consultant, prior to approval and construction.	LS
4.10-3 Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels.	LS	None required.	N/A
4.10-4 Generation of a substantial permanent increase in ambient noise levels associated with cumulative development of the proposed project in combination with future buildout of the General Plan.	LS	None required.	N/A
4.11 Public Services, Recreation, Utilities, and Service Systems			
4.11-1 Would the project result in substantial adverse physical impacts associated with the provision of new or physically	LS	None required.	N/A

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**Table 2-1
Summary of Impacts and Mitigation Measures**

Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation
altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for <u>fire protection and emergency medical services</u> .			
4.11-2 Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for <u>police protection services</u> .	LS	<i>None required.</i>	N/A
4.11-3 Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities,	LS	<i>None required.</i>	N/A

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**Table 2-1
Summary of Impacts and Mitigation Measures**

Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation
need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for <u>schools and other public facilities.</u>			
4.11-4 Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered parks, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, or increase the use of existing neighborhood and regional parks such that substantial physical deterioration would occur or be accelerated, or include or require the construction or expansion of <u>recreational facilities</u> which might have an adverse physical effect on the environment.	LS	<i>None required.</i>	N/A
4.11-5 Require or result in the relocation or construction of new or	LS	<i>None required.</i>	N/A

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**Table 2-1
Summary of Impacts and Mitigation Measures**

Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation
expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects.			
4.11-6 Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years.	LS	<i>None required.</i>	N/A
4.11-7 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.	LS	<i>None required.</i>	N/A
4.11-8 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, or conflict with federal, State, and local management and reduction statutes and regulations related to solid waste.	LS	<i>None required.</i>	N/A

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**Table 2-1
Summary of Impacts and Mitigation Measures**

Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation
4.11-9 Increase in demand for public services associated with the proposed project, in combination with future buildout of the City of Manteca.	LS	<i>None required.</i>	N/A
4.11-10 Increase in demand for utilities and service systems associated with the proposed project, in combination with future buildout of the City of Manteca.	LS	<i>None required.</i>	N/A
4.12 Transportation			
4.12-1 Conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities.	LS	<i>None required.</i>	N/A
4.12-2 Conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b), during Existing Plus Project Conditions.	S	<p>4.12-2 <i>Prior to issuance of a certificate of occupancy, transportation demand management measures shall be implemented to the maximum extent feasible, subject to the approval of the City of Manteca Planning Department. Potential transportation demand management measures include, but are not limited to:</i></p> <ul style="list-style-type: none"> • <i>Increase residential density;</i> • <i>Limit residential parking supply;</i> • <i>Improve street connectivity;</i> • <i>Provide ride-share program;</i> • <i>Implement subsidized or discounted transit program;</i> 	SU

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**Table 2-1
Summary of Impacts and Mitigation Measures**

Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation
		<ul style="list-style-type: none"> • Provide bicycle facilities at the proposed school; • Provide community-based travel planning; • Provide pedestrian network improvement; • Construct or improve bike facility; • Construct or improve bike boulevard; • Expand bikeway network; • Implement conventional or electric carshare program; • Implement pedal or electric bikeshare program; • Implement scooter-share program; • Extend transit network coverage or hours; • Increase transit service frequency; • Implement transit-supportive roadway treatments; and • Reduce transit fares. 	
4.12-3 Substantially increase hazards to vehicle safety due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment) or result in inadequate emergency access.	LS	<i>None required.</i>	N/A
4.12-4 Conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b), during	S	4.12-4 Implement Mitigation Measure 4.12-2.	SU

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Table 2-1 Summary of Impacts and Mitigation Measures			
Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation
Cumulative Plus Project Conditions.			

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3. PROJECT DESCRIPTION

3.0. PROJECT DESCRIPTION

3.1 INTRODUCTION

Pursuant to CEQA Guidelines Section 15124, an EIR is required to include a project description that includes the following information: project objectives, project location, a general description of the project's technical, economic and environmental characteristics, and a statement briefly describing the intended uses of the EIR including a list of agencies expected to use the EIR, a list of permits and other approvals required to implement the project, and a list of related environmental review required by federal, state or local laws, regulations or policies. According to Section 15124 of CEQA Guidelines, the project description is not required to supply extensive detail beyond that needed for evaluation and review of the environmental impacts.

Section 15125 of CEQA Guidelines requires an EIR to include a description of the physical environmental conditions in the vicinity of the project, as they exist at the time the Notice of Preparation is published, from both a local and regional perspective. Knowledge of the existing environmental setting is critical to the assessment of environmental impacts. Pursuant to CEQA Guidelines Section 15125, the description of the environmental setting shall not be longer than necessary to understand the potential significant effects of the project and its alternatives.

The Project Description chapter of the EIR provides a comprehensive description of the Hat Ranch Project (proposed project) in accordance with the CEQA Guidelines. Please note that this chapter provides an overall general description of the existing environmental conditions; however, detailed discussions of the existing setting in compliance with Section 15125 of CEQA Guidelines, as it relates to each given potential impact area, is included in each technical chapter of this EIR.

3.2 PROJECT LOCATION

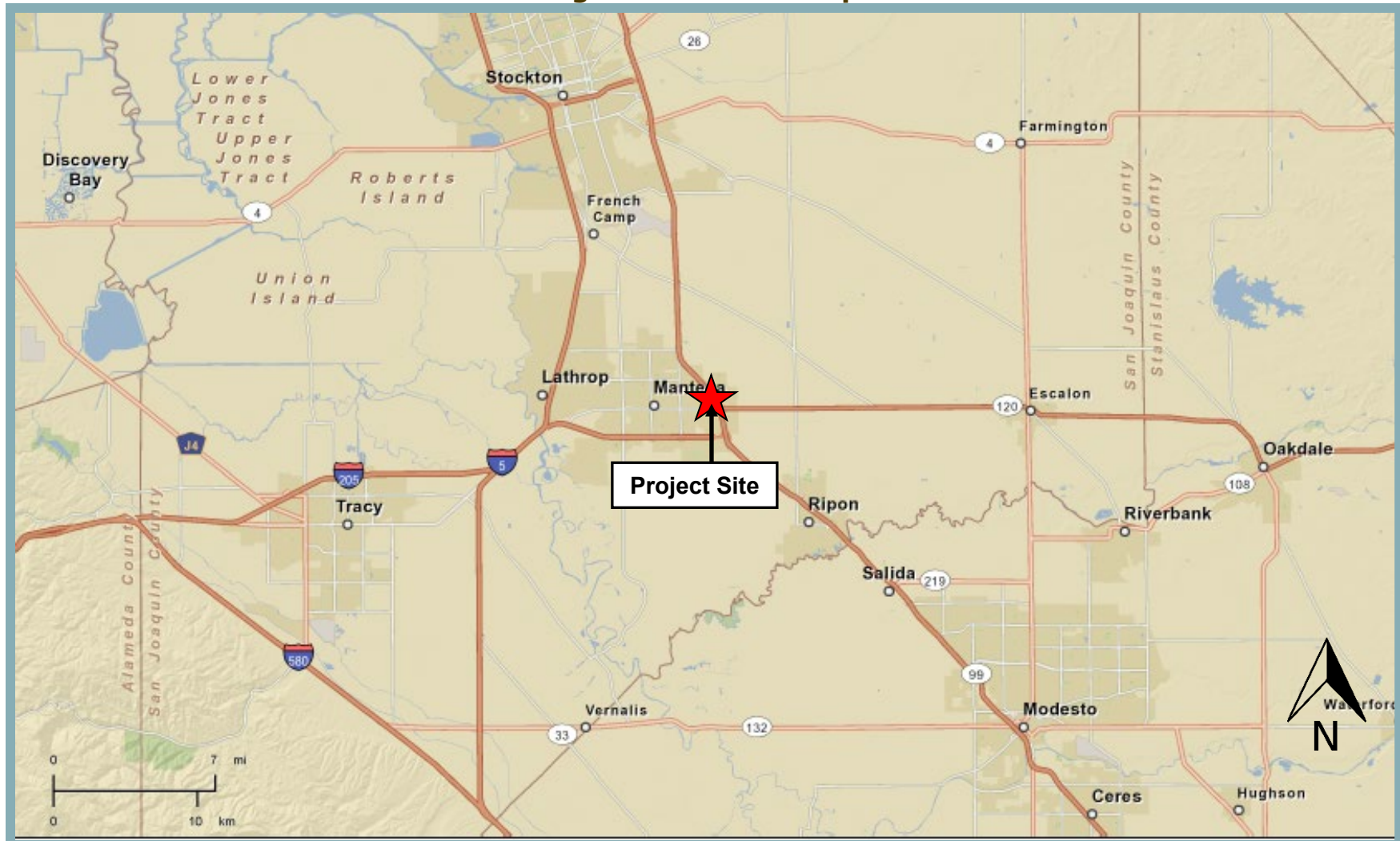
The proposed project site is located in a currently unincorporated area of San Joaquin County, southeast of the City of Manteca limits, south of State Route (SR) 120 and west of SR 99 (see Figure 3-1). The City of Manteca limits currently make up the project's western, northern, and eastern boundaries. The site is located within the 20-year Planning Horizon of Manteca's existing Sphere of Influence (SOI), and is identified as San Joaquin County Assessor's Parcel Numbers (APNs) 226-120-10, -11, and 226-140-04.

3.3 PROJECT SETTING AND SURROUNDING LAND USES

The site consists of three parcels totaling approximately 184.7 acres. The project site is currently designated Urban Reserve-Low Density Family Residential (UR-LDR), Park (P), and Commercial Mixed Use (CMU) by the City of Manteca General Plan. The San Joaquin County General Plan designates the site as Agriculture-Urban Reserve (A/UR). Currently, the site is planted with vineyards and contains a large barn, an office structure, a tree-lined driveway, and a 20,000-square-foot (sf) residence.



**Figure 3-1
Regional Location Map**



It should be noted that, per the Preferred Land Use Map in the City's Draft General Plan Update dated February 2019, future land use designations for the project site are anticipated to consist of approximately 152.4 acres of Low-Density Residential (LDR) land, 16.1 acres of Public/Quasi-Public (PQP) land, and 16.2 acres of P land, consistent with the uses that would be developed as part of the proposed project.

Land surrounding the project site on all sides is currently designated as LDR by the existing City of Manteca General Plan. The San Joaquin County General Plan designates the unincorporated land to the south of the site as General Agriculture (A/G). As shown in Figure 3-2, low-density residential development associated with the Pillsbury Estates, Woodward Park, and Evans Estates communities are located to the north and the west, while the lands directly south and east of the project site are planted with orchards. However, as mentioned above, the southern and eastern lands planted with orchards are designated LDR per the City's General Plan. As part of development of the proposed project, the future Antone Raymus Parkway is proposed along the southern boundary of the site, and an extension of Atherton Drive is proposed along the eastern boundary of the site. Pillsbury Road would be extended through the project site from the north to connect the proposed project to the existing northern residential communities. Areas further south of the project would remain within the County and consist of agricultural uses.

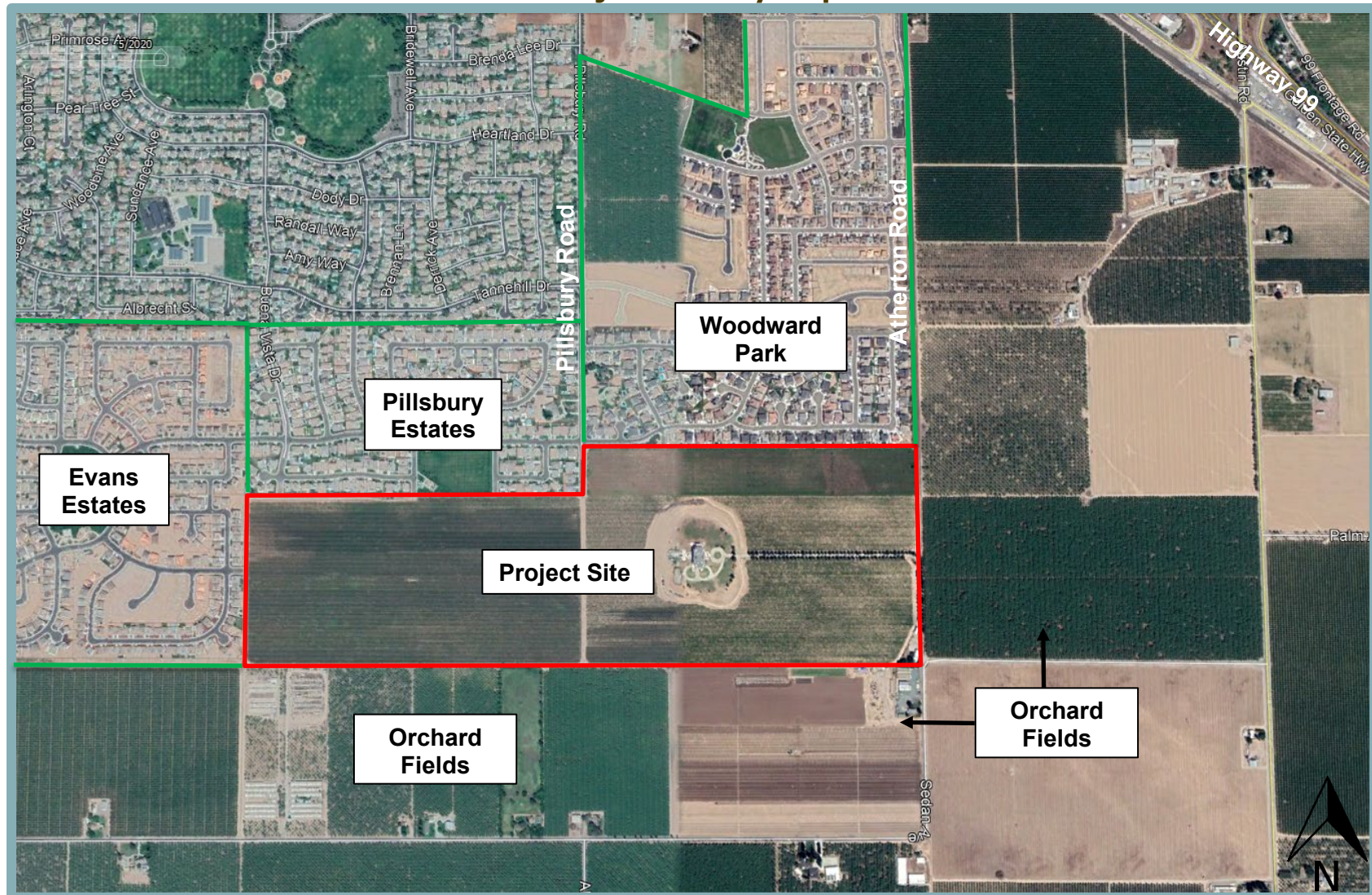
3.4 PROJECT OBJECTIVES

The objectives for the proposed project are as follows:

1. Establish a 184.7-acre, well-planned community, which incorporates 152.4 acres of Low-Density Residential Land to accommodate approximately 634 single-family homes and 104 half-plex units, a 16.1-acre elementary/middle school site, and two neighborhood parks totaling 16.2 acres.
2. Design a land use plan with uses complementary to existing surrounding Low-Density Residential neighborhoods and in symmetry with the larger Manteca community including approximately 634 single-family homes and 104 half-plex units.
3. Provide housing opportunities responsive to the needs of Manteca, the region and market conditions, to serve a range of family incomes and household types, including approximately 634 single-family homes and 104 half-plex units.
4. Provide a pedestrian-friendly community that provides connections and access between the existing communities and Hat Ranch to the recreational areas within the public parks within the project.
5. Provide a land use plan, design standards, and guidelines consistent with Manteca General Plan goals and policies for Low Density Residential neighborhoods, incorporate market-acceptable design features, and foster an attractive, well-maintained community.
6. Establish a land use and circulation system that promotes convenient mobility, completes the extension of Pillsbury Road to Antone Raymus Parkway, and provides a setting that is safe, accessible, and convenient for all modes of travel.
7. Provide off-site improvements for Atherton Drive and Antone Raymus Parkway to complete the circulation routes as planned in the Circulation Element of the City of Manteca's General Plan.
8. Provide a comprehensive infrastructure system, including parks, open space, storm water quality facilities, roadways, and utilities infrastructure sized to serve the project and adjacent properties.



**Figure 3-2
Project Vicinity Map**



3.5 PROJECT COMPONENTS

The proposed project would be a master planned residential community of up to 738 single-family residences and half-plex units, two neighborhood parks, an elementary/middle school, and associated circulation improvements located on approximately 184.7 acres of land in unincorporated San Joaquin County and within the City of Manteca's SOI. The proposed project would require annexation to the City of Manteca, a General Plan Amendment (GPA), and Rezoning. The proposed project would also require a Tentative Map, a Development Agreement, and approval of the Design Review Guidelines.

In 2013 an application for a development project was submitted on the project site. The CEQA process was initiated; however, the project did not move forward and an environmental document was not finalized for public review. That process was halted. The review of the current application is a separate project with a new CEQA process. Details regarding each of the proposed project components are presented below.

It should be noted that for the purposes of this environmental analysis, the term "West Parcel" refers to the parcels to be developed to the west of Pillsbury Road (APNs 226-120-10 and -11), while the term "East Parcel" refers to the parcel to be developed to the east of Pillsbury Road (APN 226-140-04). The term "West Neighborhood Park" refers to the dedicated parkland located within the West Parcel, and the term "East Neighborhood Park" refers to the dedicated parkland located within the East Parcel, adjacent to the proposed elementary/middle school.

Annexation

The proposed project is currently located within San Joaquin County and has a San Joaquin County General Plan land use designation of A/UR, allowing for a maximum of one residential unit per 20 acres. The project site is proposed to be annexed into the City of Manteca. The annexation of the 184.7-acre site to the City of Manteca ultimately requires San Joaquin Local Agency Formation Commission (LAFCo) approval. In addition, as the proposed project would be served by the Manteca Fire Department upon formal annexation, detachment from both the Lathrop-Manteca Fire District (for the West Parcel) and the Ripon Consolidated Fire District (for the East Parcel) would require approval by San Joaquin LAFCo. Finally, the proposed project would also require approval by San Joaquin LAFCo of detachment from the San Joaquin County Resource Conservation District (RCD). It should be noted that the properties surrounding the project site have recently been annexed into the City, including the Woodward Park residential community to the north and the Evans Estates residential community to the east. Thus, the proposed annexation would help complete the southern boundary of the City and would not create an island within the City of Manteca.

General Plan Amendment

The project site is currently designated as UR-LDR, P, and CMU, pursuant to the currently adopted City of Manteca General Plan. The proposed project would require a GPA to modify the CMU (approximately 7.6 acres) and UR-LDR designations to LDR, thereby redesignating approximately 152 acres of land to LDR uses. The amount of parkland within the project site would increase to approximately 16.2 acres and would be divided into two park areas located on the eastern and western sides of Pillsbury Road, referred to as East Neighborhood Park and West Neighborhood Park, respectively. Therefore, a GPA would also be required for both the increase in parkland and the relocation of parkland within the project site. In addition, approximately 16.1 acres of PQP-designated land would be set aside for a proposed elementary/middle school.



The Preferred Land Use Map in the City's Draft General Plan Update, dated February 2019, shows the project site land use designations as LDR, PQP, and P. The proposed GPA designations would be consistent with the Preferred Land Use Map in the Draft General Plan Update. Figure 3-3 shows the proposed GPA designations.

Prezoning/Planned Development

Consistent with the Cortese-Knox-Hertzberg Local Government Reorganization Act, Prezoning would be applied to the annexation areas (see Gov. Code Section 56375). In conformance with the proposed Manteca General Plan land use designations, the proposed project site would be Prezoned from AG-40 to the City's Planned Development Low Density Residential (PD-R-1), PQP, and PD-Park (PD-P) zoning districts.

According to Section 17.30.030 of the City's Municipal Code, allowed uses within a PD zoning district are those uses listed in the adopted PD document. Where a PD does not provide a listing of allowed uses, the regulations of the base zoning district would prevail. In the case of the proposed project, the base zoning district is R-1. The applicant has requested a PD, which would address the proposed inclusion of alternative streetscape features and design elements that deviate from the City's standard plans. As noted above, allowed uses within a PD zoning district are those listed uses in the adopted PD document, subject to City Council approval. Where an approved PD does not provide a listing of allowed uses, the regulations of the base zoning district prevail. Pursuant to the proposed PD, each residence would contain a two-car garage, three bedrooms, one to two bathrooms, one to two living rooms, kitchen and dining areas, and storage areas. As part of the proposed PD standards, the required amount of open space for both single-family residences and the half-plex units would be reduced to 30 percent from the standard 40 percent for R-1 zoning uses. Open space areas within the proposed areas would include porch areas, outdoor living areas, and private open space within the backyards.

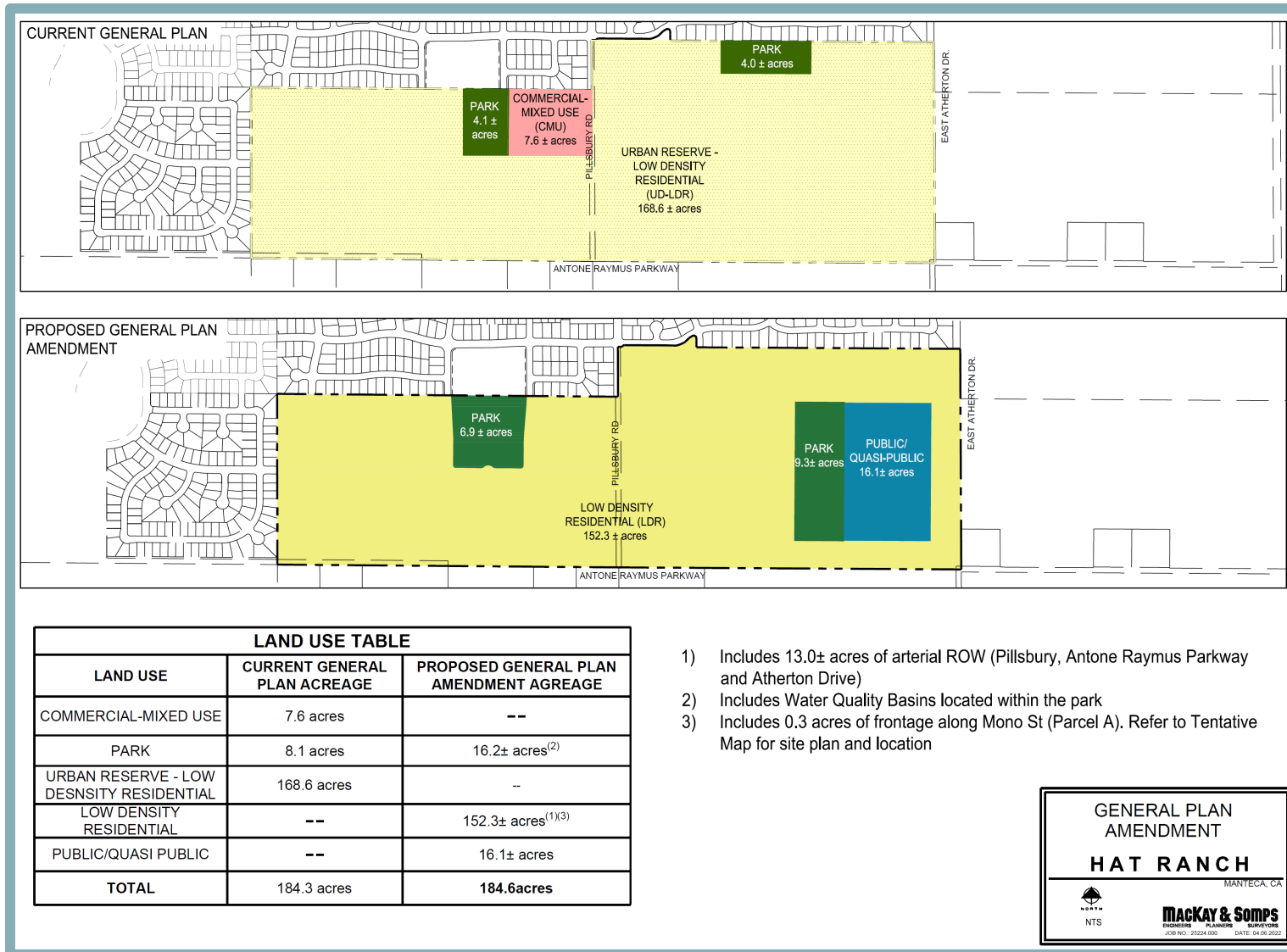
Tentative Map

The design elements of the Tentative Map, which consists of both the East Parcel and West Parcel, are discussed in further detail below and summarized in Table 3-1.

Table 3-1 Project Site Development Summary		
Land Use	Number of Units	Acreage
Single-Family Detached Units	West Parcel: 291 East Parcel: 343	+/- 94
Half-Plex Units	West Parcel: 40 East Parcel: 64	+/- 9.6
West Parcel School Site (K-8)	N/A	+/- 16.1
Parks	N/A	West Parcel: +/- 6.9 East Parcel: +/- 9.3
Streets and Infrastructure	N/A	+/- 48.8
Total:	Single-Family Detached: 634 Half-Plex Units: 104	+/- 184.7
Note: The acreages shown in this table are net acres, which are generally defined as only the developable area of a lot or parcel and excludes private drives, public roads, and landscape lots. However, the density of each parcel is calculated in this EIR using gross acres, which are generally defined as the entire lot or parcel and includes private drives, public roads, and landscape lots.		



**Figure 3-3
General Plan Amendment**



Residential Uses and Parkland

The proposed project would include demolition of the existing on-site residence and the development of single-family residences consistent with the surrounding single-family residential communities north of the project site. The East Parcel would include approximately 407 dwelling units over approximately 102.9 gross acres of land, resulting in a density of 3.96 dwelling units per acre (du/ac). Of the 407 dwelling units, approximately 343 would be constructed as single-family residential units, with lots ranging in size from 4,500 sf to 7,000 sf and the units ranging in size from 2,554 sf to 4,563 sf. The remaining 64 units in the East Parcel would consist of half-plex units, which are typically two attached units sold individually. The half-plex lots would feature two lot sizes: 3,151 sf or 4,042 sf. The half-plex units would range between 1,545 sf and 1,798 sf. In addition, the East Parcel would allocate approximately 9.3 gross acres to parkland, which would be located directly adjacent to a proposed elementary/middle school consisting of 16.1 gross acres (see Figure 3-4).

The West Parcel would include approximately 331 dwelling units over approximately 81.8 gross acres of land, resulting in a density of 4.05 du/ac. Of the 331 dwelling units, 291 would be constructed as single-family residential units, while 40 of the dwelling units would be half-plex units. The single-family residences would range in lot size from 5,000 sf to 6,000 sf. The West Parcel single-family units would range in size from 2,923 sf to 3,743 sf. The parcel's half-plex units would feature lot sizes of either 2,520 sf or 3,694 sf. The half-plex units would range in size from 1,518 sf to 1,755 sf. The West Parcel would also contain 6.9 gross acres of parkland and upland play area along the northern boundary of the project site (see Figure 3-5).

The proposed density of the single-family units would be consistent with the R-1 development standards set forth by the City's Zoning Code, ranging between 2.1 du/ac and eight du/ac. The maximum allowed building height of 30 feet and the minimum setback areas would also conform with the R-1 standards. The proposed PD standards for the half-plex units would be slightly adjusted to maintain a density between 2.1 du/ac and eight du/ac. The maximum building height for the half-plex units would be consistent with the single-family residences; however, minimum setbacks would be reduced. Front setbacks would be a minimum of 15 feet, side setbacks would range between zero feet and five feet, and rear setbacks would range between five feet and 10 feet (see Figure 3-6).

School Site (K-8)

The proposed school is anticipated to serve approximately 675 students at the kindergarten to 8th grade school levels. Per the Conceptual Site Plan for the East Neighborhood Park, the elementary/middle school would include a paved hard-court area and four basketball courts, in addition to classrooms, administrative offices, and parking areas. Two soccer fields and a baseball diamond would also be included as part of the school's dedicated recreational areas. Design of the proposed school would ultimately fall under the jurisdiction of the Ripon Unified School District (RUSD).

Streets and Infrastructure

The following discussion is based on the proposed circulation and infrastructural improvements included in the Tentative Map, which consists of both the East Parcel and the West Parcel. As shown in Table 3-1, streets and infrastructural improvements would constitute a total of 46.6 net acres within the project site.



Figure 3-4
Hat Ranch Site Plan – East Parcel

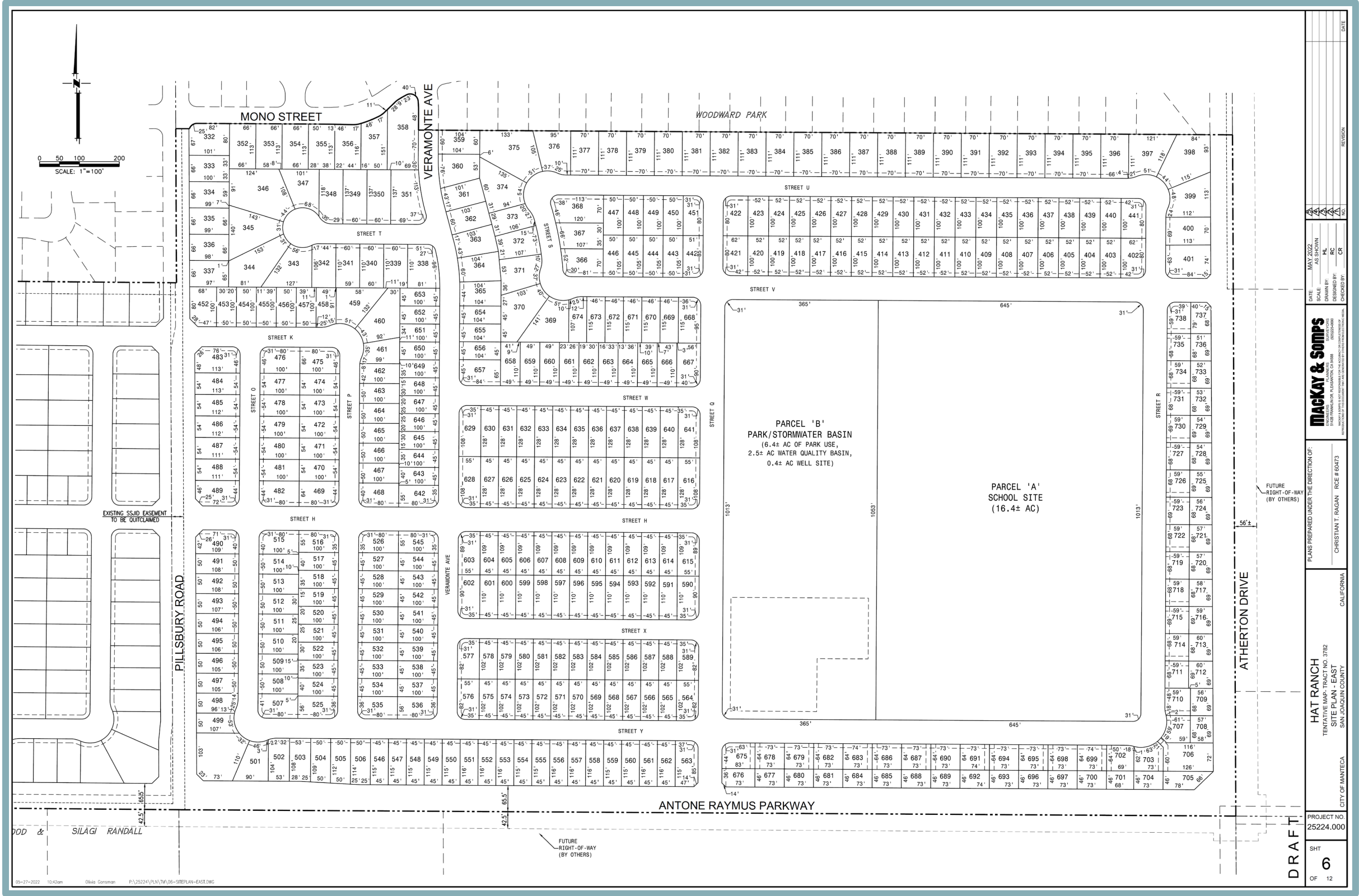
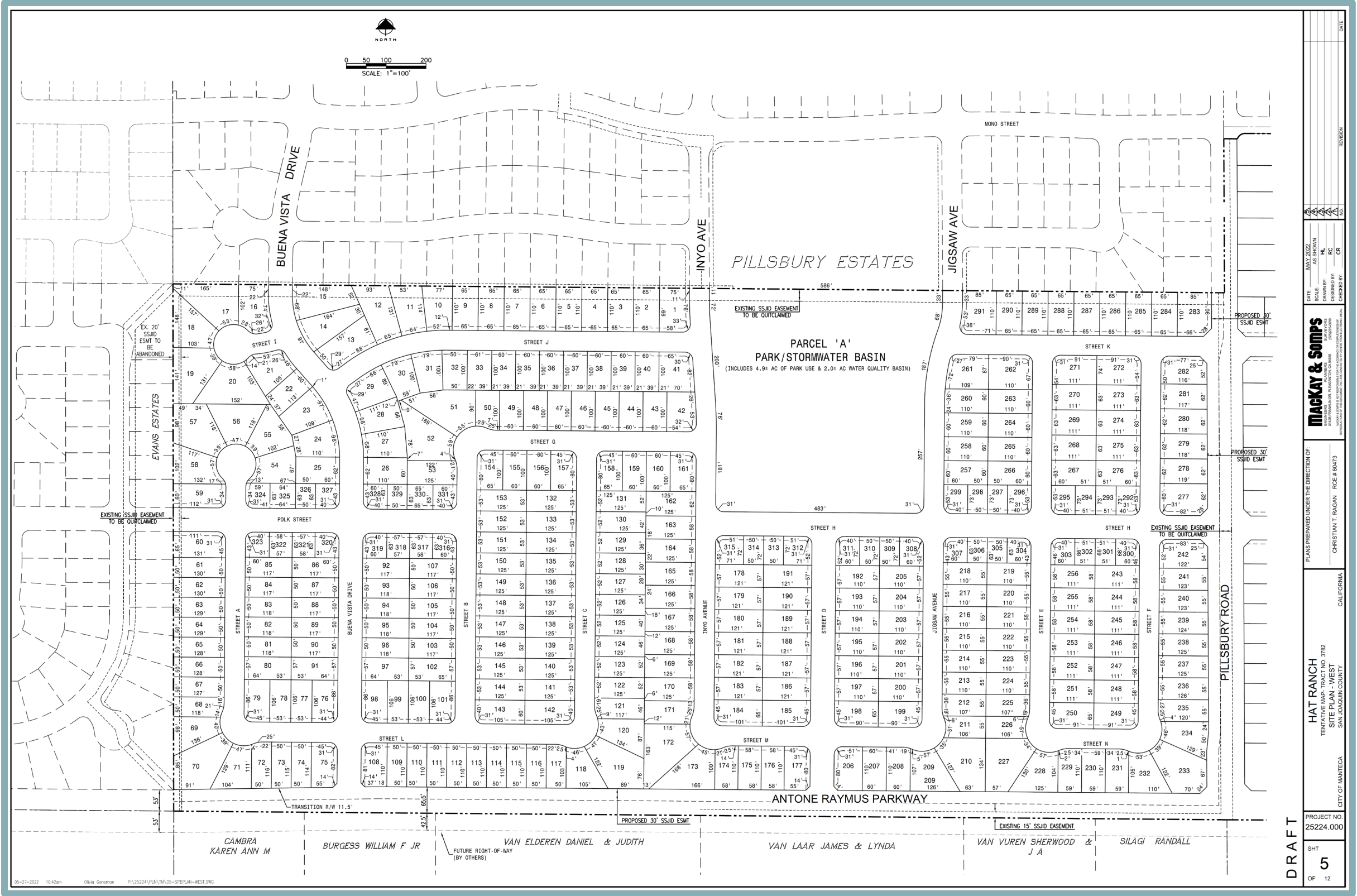


Figure 3-5
Hat Ranch Site Plan – West Parcel



DRAFT

PROJECT NO. 25224.000

SHT 5 OF 12

HAT RANCH
TENTATIVE MAP - TRACT NO. 3782
SITE PLAN - WEST
SAN JOAQUIN COUNTY
CITY OF MANTECA

PLANS PREPARED UNDER THE DIRECTION OF:
CHRISTIAN T. RAGAN RICE #60473 CALIFORNIA

Mackay & Somp
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DATE: MAY 2022
AS SHOWN: HL
DESIGNED BY: RC
CHECKED BY: CR
REVISION: 1

Figure 3-6
Half-Plex Floor Plan 1 and 2



Roadways/Circulation

The main entrances into the Hat Ranch site would be at Pillsbury Road, the future Antone Raymus Parkway, and the Atherton Drive extension. Internal street connections would be provided to the adjacent Pillsbury Estates and Woodward Park developments to the north and Evans Estates to the west by extending the existing stub streets of Polk Street, Buena Vista Drive, Inyo Avenue, and Jigsaw Avenue into the project site.

With respect to Pillsbury Road, the project applicant would be required to dedicate right-of-way (ROW) to accommodate a 90-foot full-width street section that tapers to 95 feet prior to the road's intersection with the proposed Antone Raymus Parkway. The proposed project would construct a new street structural section, curb, gutter, an eight-foot-wide meandering sidewalk, landscaping with trees and an automatic irrigation system, street lights, signage, striping, and a 12-foot-wide raised landscaped median with an automatic irrigation system centered on the Pillsbury Road centerline. The project applicant would additionally be required to acquire ROW on the City's behalf to accommodate a 66-foot full-width street section to the north of the project site.

With respect to the proposed Antone Raymus Parkway, the roadway would feature an east-to-west layout from Manteca Road to the Atherton Drive extension and would be constructed over two phases, interim condition and ultimate condition. The proposed project would be responsible for development of only the road's interim condition. Under the interim condition, the project applicant would be required to dedicate ROW to accommodate a 65.5-foot half-width street section. The project would construct a new street structural section, curb, gutter, an eight-foot-wide meandering sidewalk parallel to the north of the road, landscaping with trees and an automatic irrigation system, street lights, signage, and striping. The improvements would be constructed from Main Street to the Atherton Drive extension. The Antone Raymus Parkway/Pillsbury Road intersection would be stop-controlled.

The Atherton Drive off-site improvements would be constructed from the proposed Antone Raymus Parkway to the existing Atherton Drive stub, located to the north of the project site. The project applicant would be required to dedicate ROW to accommodate a 56-foot half-width street section. The project would construct a new street structural section, curb, gutter, an eight-foot-wide meandering sidewalk parallel to the west of the road, landscaping with trees and an automatic irrigation system, street lights, signage, striping, and a seven-foot-wide raised landscape median with an automatic irrigation system.

Water

The City provides water service for the residential, commercial, and public users in Manteca. According to the Urban Water Management Plan (UWMP), the City serves approximately 24,900 connections and supplies approximately 10,058 acre-feet (AF) of water per year. Manteca's municipal water supply system is based on an interconnected grid design, wherein new development expands the existing grid system and new municipal water wells are added as they are needed to maintain adequate water supply.

The City of Manteca receives water supplies from two sources: groundwater from local wells and surface water supplied by the South San Joaquin Irrigation District (SSJID). The SSJID operates a water treatment plant near the SSJID's Woodward Reservoir, and the treated water is conveyed to Manteca through a series of pipelines. Water would be provided to the project site via new connections to the existing water infrastructure surrounding the project site. Water pipes of an



unspecified diameter would run beneath the streets to ensure adequate flow to all portions of the project for both domestic use and fire protection.

As shown in Figure 3-7 and Figure 3-8, the proposed water system within the project's interior roadways would connect to a new water main within the future Antone Raymus Parkway. The water main within Antone Raymus Parkway would then be extended westward within the road's ROW to the Manteca Road/Antone Raymus Parkway intersection, at which point the water main would be extended northward to connect to the existing City water main within Manteca Road (see Figure 3-9). An off-site connection to an existing water line within Atherton Drive to the north would also be required. In addition, the proposed project would allocate space for a future 125-foot by 150-foot parcel for a City-operated water well within the East Neighborhood Park to accommodate new development within the City of Manteca.

Wastewater

The City's Wastewater Quality Control Facility (WQCF) has capacity to treat 9.87 million gallons per day (MGD) and currently treats 6.5 MGD. The project site is located in the South Manteca Trunk Sewer shed. Wastewater from the proposed project would be conveyed through new sanitary sewer pipes located within the proposed roadways. The wastewater pipes would flow westward through pipes along the future Antone Raymus Parkway, connecting to a new off-site sewer lift station and existing sanitary sewer lines within Manteca Road where wastewater would flow north, eventually connecting to the existing wastewater main along Woodward Avenue.

Stormwater Detention

Stormwater facilities required for the proposed project, including storm drain inlets and pipes, would be constructed consistent with City requirements. Stormwater from the East Parcel and the West Parcel would be diverted to each area's respective stormwater detention and treatment facilities prior to being discharged to the storm drain system.

Within the East Parcel, stormwater from residences would flow through new drain inlets and connections to underground storm drain pipes, which would direct flows to a 3.9-acre detention basin located in the northwest portion of the East Neighborhood Park, adjacent to the elementary/middle school site. The detention basin, which would feature an effective depth of five feet, would be designed to store stormwater to reduce the peak rate of runoff to the storm drainage system during rain or flood events. Following temporary storage in the detention basin, stormwater flows would be pumped by way of a new pump station to a 1.8-acre bioretention basin located in the southwest portion of the park. The bioretention basin would provide stormwater treatment through a series of layers, consisting of a 1.5-foot ponding depth, 1.5-foot media depth, and one foot of gravel. After treatment, stormwater would flow through a pump station and connect to a force main located in Pillsbury Road, which would then extend to SSJID Lateral X.



Figure 3-7
Hat Ranch Utilities Plan – East Parcel

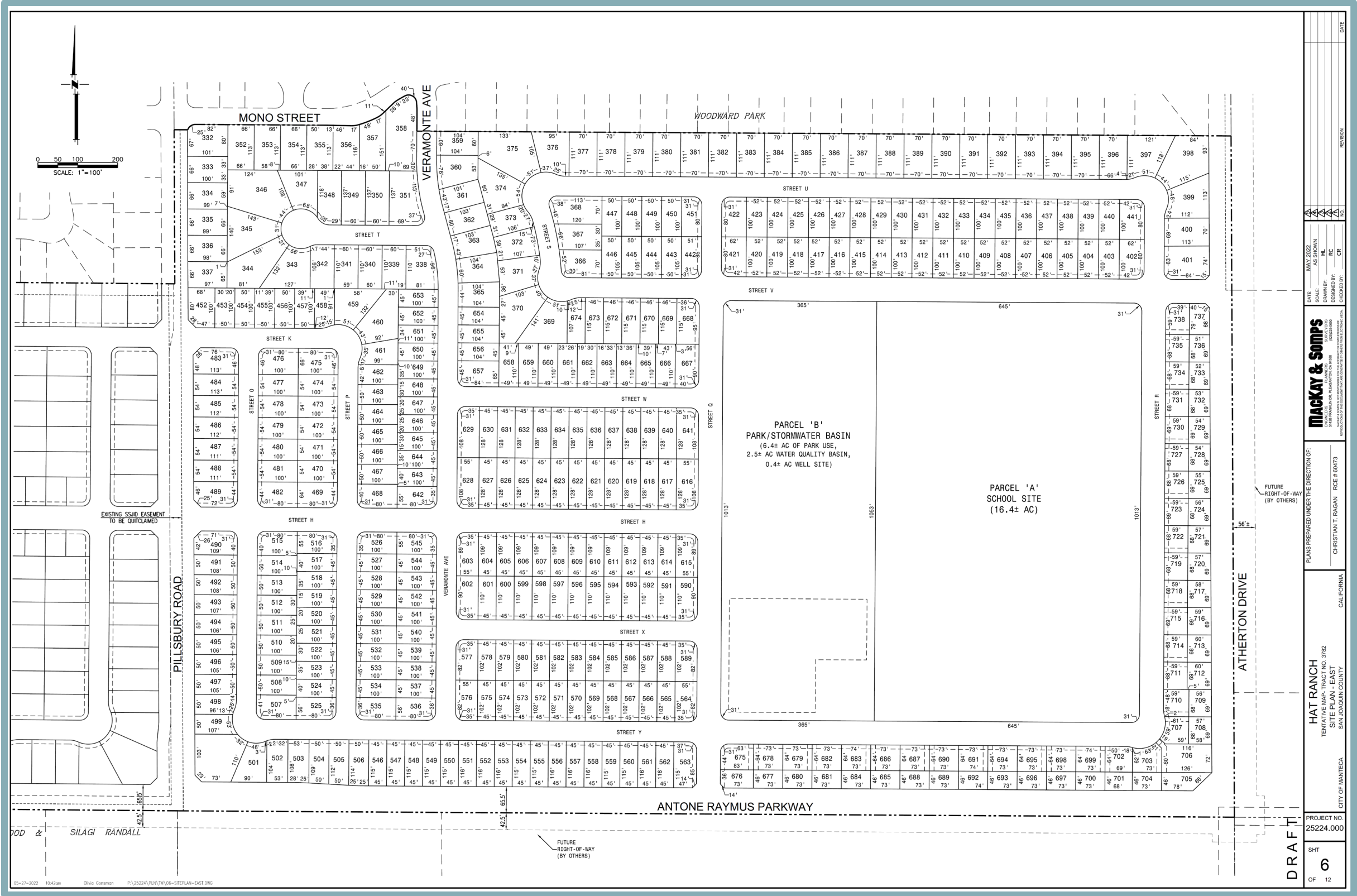


Figure 3-8
Hat Ranch Utilities Plan – West Parcel

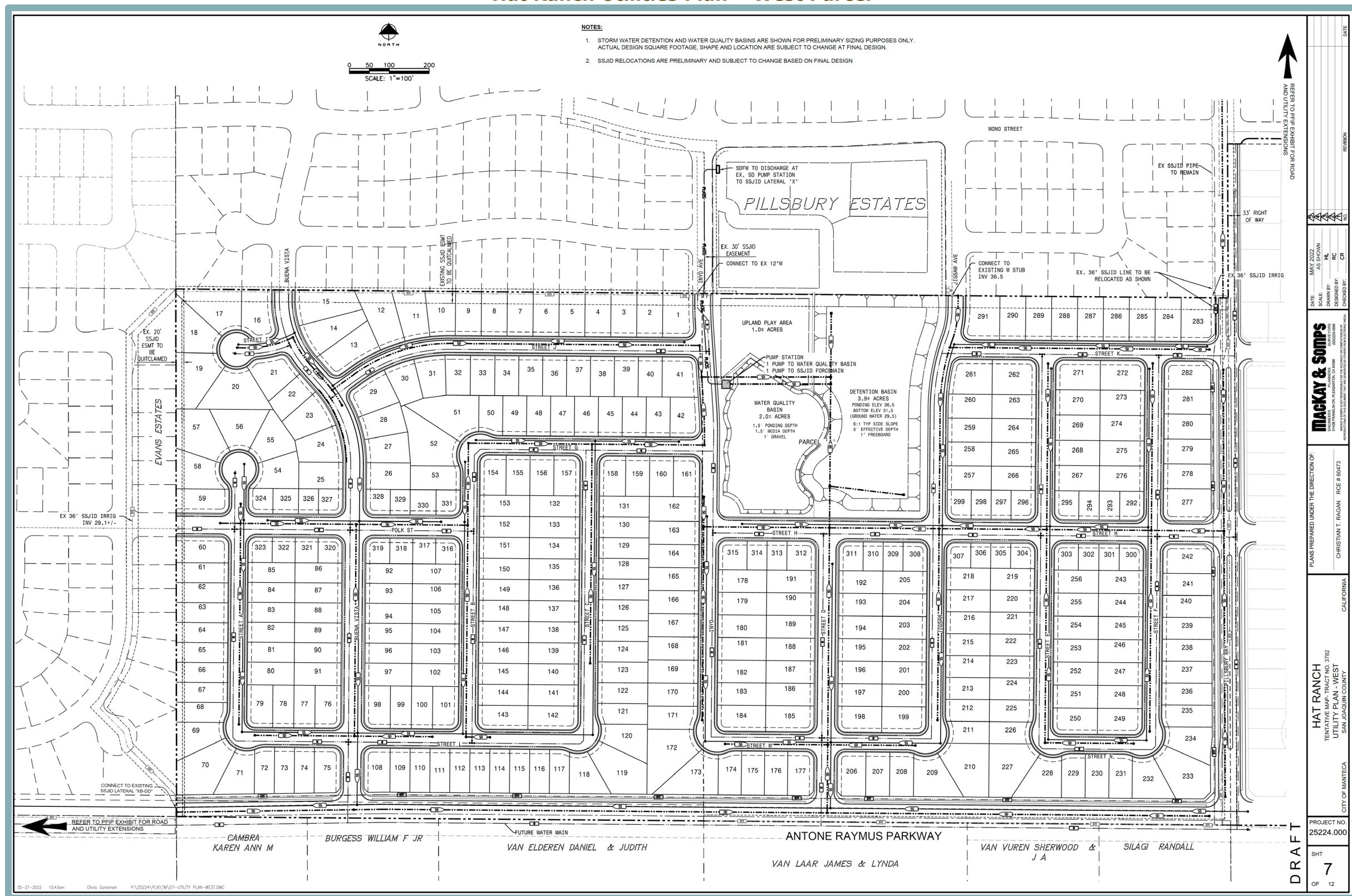
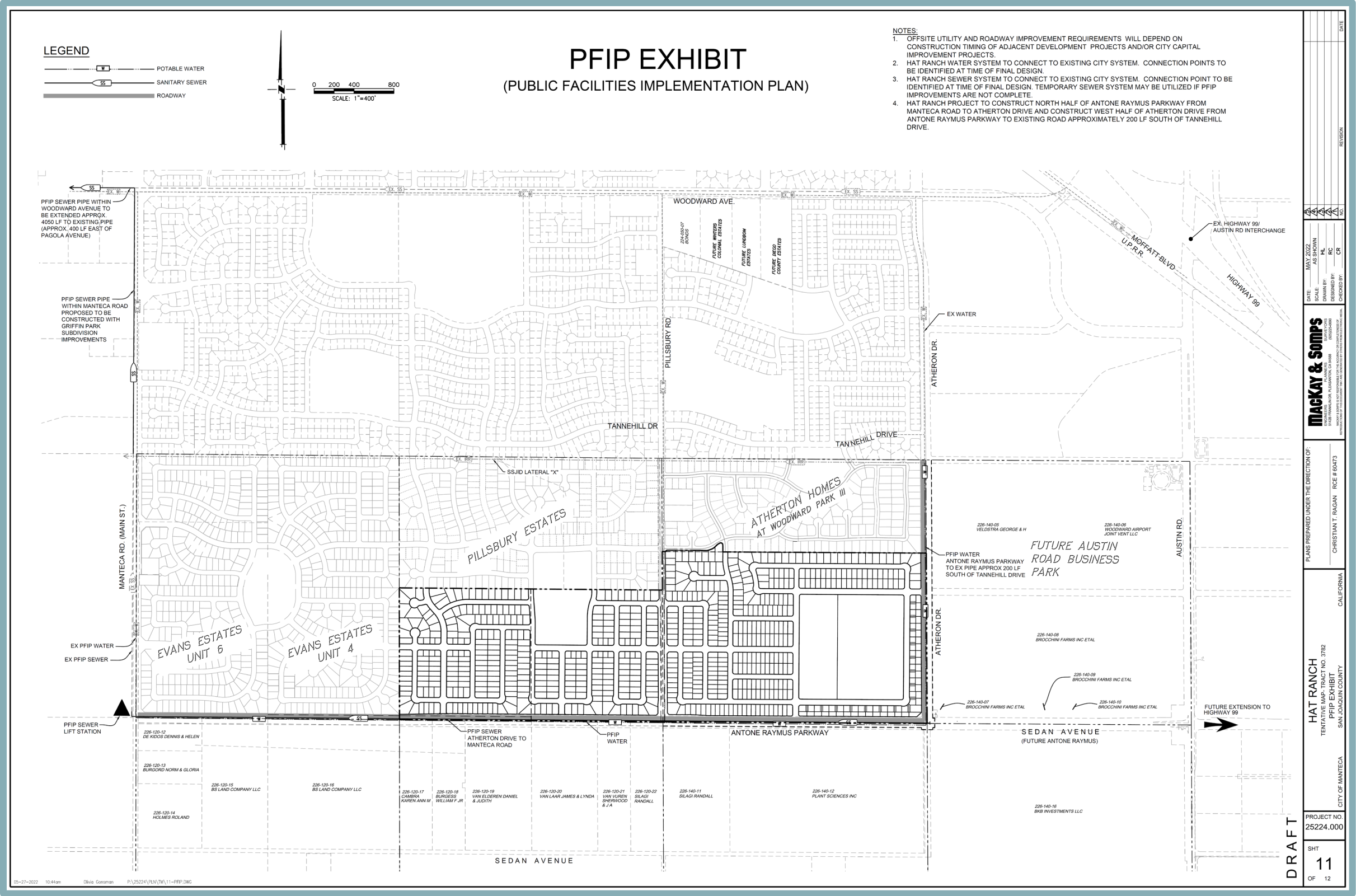


Figure 3-9
Hat Ranch Public Facilities Implementation Plan Exhibit



Within the West Parcel, stormwater from residences would flow through new drain inlets and underground pipes to a 2.8-acre detention basin, located generally within the eastern half of the West Neighborhood Park. The detention basin would similarly be designed with an effective depth of five feet to reduce the peak rate of runoff to the storm drainage system during rain or flood events. Following temporary storage in the detention basin, stormwater flows would be pumped by way of a new pump station to a 1.4-acre bioretention basin located generally within the western half of the park. The bioretention basin would provide stormwater treatment through a series of layers comprised by a 1.5-foot ponding depth, 1.5-foot media depth, and one foot of gravel. After treatment, a second pump station would direct flows to the force main located in Pillsbury Road extending to SSJID Lateral X. From SSJID Lateral X, treated stormwater from both parcels would flow to the French Camp Outlet Canal, which drains to the French Camp Slough and eventually the San Joaquin River.

Development Agreement

A Development Agreement between the applicant and the City of Manteca would be included as part of the proposed project, which would allow the City and the applicant to enter into an agreement to assure the City that the proposed project would be completed in compliance with the plans submitted by the applicant, and assure the applicant of vested rights to develop the project.

Design Review Guidelines

As part of the Planned Development, the proposed project would require approval of Design Guidelines which provide the framework for future development within the project site. The objectives of the guidelines are to provide the City of Manteca with the assurance that the project site would develop towards a unique community with consistent quality, while allowing for diversity and variation throughout the neighborhoods.

Architecture

The intended architectural character for the proposed project draws from the architectural character of the region and would incorporate both Farmhouse-Inspired and Spanish-Inspired architectural styles. The single-family detached residences would be single-story, while the half-plex units would be designed as two-story structures. The conceptual perspective maps of the proposed residences provide for porch areas, second-story balconies within the half-plex units, shingle/shake roofs, and two car garages. Adjacent dwelling units would be different color schemes for street scene variation, including earth tones and pastel blues, greys, and greens. In addition, sound walls would provide a safety and noise barrier between the new roadways and the rear sides of the proposed residences.

Landscaping

The proposed landscaping elements are intended to enhance the visual quality of the proposed project as well as create a strong sense of community identity through the use of unified material and color palettes. As indicated in the conceptual perspective maps, the frontages of the proposed residences would be planted with drought-tolerant ground cover, in addition to various shrub and tree species. The landscaping elements would be used to provide aesthetic treatment while maintaining safety for residents and users of the project site. Landscaping trees would conform to the City of Manteca's approved tree list.

Trees planted along sidewalks and roadways, otherwise known as "streetscapes," would provide an enhanced community experience of walking or driving throughout the proposed project. The



scale and size of the trees would be chosen to conform with the scale and width of streets. Five to 10-foot landscaped corridors along both sides of Pillsbury Road and the sides of Atherton Drive and the Antone Raymus Parkway which contain the proposed residences would include shrubs, trees, and drought-tolerant groundcover. Major intersections, focal points, and entries into the project site would utilize landscaping trees as wayfinding features and/or backdrops to monumentation. Lawns would not be provided within the streetscape areas.

Parks

Two proposed parks, referred to locationally as “West Neighborhood Park” and “East Neighborhood Park,” would be located on either side of Pillsbury Road. Each park would be accessible through a network of sidewalks. The proposed design guidelines for the park areas include turf areas within active play areas; shrubs and ground cover palettes; use of low-water plants; site furnishings made of durable, long-lasting material; stormwater treatment basins; enhanced paving for walks; and a variety of recreation facilities, including sports fields and dining areas. All proposed recreational facilities would meet the requirements of the City of Manteca Parks Department Standards and Specifications for Landscape Development.

The West Neighborhood Park would connect to the existing Pillsbury Park north of Hat Ranch. The connection would double the size of the park and would create an opportunity for diverse recreational uses for both communities. The West Neighborhood Park would include active play areas, including a volleyball/pickleball court, a basketball court, and a lawn bowling field (see Figure 3-10). A dog park and vine-covered pavilion for small gatherings and outdoor dining would be included, as well as a regulation soccer field which would overlay the underground bioretention basin within the southeastern portion of the park area. Landscaping trees would border the primary pedestrian circulation areas throughout the park to provide shade within gathering/dining spaces and walkways. Trees would also provide shaded areas throughout the stormwater treatment area located within the southwestern portion of the park. The area overlying the stormwater treatment facilities would be designed as a dispersed seating/picnic area with gradual slopes and a trail system made of decomposed granite. The trail would traverse throughout the southwestern portion of the park area, connected by small pedestrian bridges over water channels associated with the treatment area and stormwater chambers.

The East Neighborhood Park would be shared between the surrounding residences and the proposed elementary/middle school. Recreational facilities would include active play areas, a water play zone, a basketball court, a multi-purpose activity field, pickleball/volleyball courts, and a soccer field (see Figure 3-11). The soccer field would be bounded by formal rows of trees along the primary pedestrian sidewalk throughout the site. A restroom and snack shack would be located next to a shaded event space which would be rentable for future events and community gatherings.

3.6 REQUIRED PUBLIC APPROVALS

The City of Manteca has discretionary authority and is the lead agency for the proposed project. The proposed project requires approval of the following entitlements by the City of Manteca:

- Approval of an Annexation for the overall 184.7-acre project site and detachment from the Lathrop-Manteca Fire District and Ripon Consolidated Fire District, as well as detachment from the San Joaquin County RCD;



Figure 3-10
West Neighborhood Park



Figure 3-11
East Neighborhood Park and Proposed Elementary/Middle School



- General Plan Amendment from UR-LDR and CMU to LDR, PQP, and an on-site relocation of and an increase in the P designation;
- Prezone of the 184.7-acre site to PD-R-1; PD-Park, and PQP;
- Approval of a Tentative Map;
- Approval of a Development Agreement; and
- Approval of Design Review Guidelines.

The proposed project would require the following additional City of Manteca approvals:

- Approval of a Grading Permit; and
- Approval of Building Permits.

Review or Approvals by Other Agencies

A number of other agencies in addition to the City of Manteca will serve as Responsible and Trustee Agencies, pursuant to CEQA Guidelines Section 15381 and Section 15386, respectively. This EIR will provide environmental information to these agencies and other public agencies, which may be required to grant approvals or coordinate with other agencies, as part of project implementation. These agencies could include, but would not be limited to, the following:

- San Joaquin County – A demolition permit approved by San Joaquin County would be required in order to demolish the existing 20,000-sf residence located east of Pillsbury Road, if the residence is demolished prior to annexation.
- San Joaquin LAFCo – Upon City approval of an Annexation Resolution, authorizing the applicants to submit formal annexation applications to San Joaquin LAFCo, the annexation of the 184.7-acre site would require San Joaquin LAFCo approval. In addition, as the proposed project would be served by the Manteca Fire Department upon formal annexation, detachment from both the Lathrop-Manteca Fire District (for the West Parcel) and Ripon Consolidated Fire District (for the East Parcel) would require approval by San Joaquin LAFCo. Finally, detachment from the San Joaquin County RCD would require approval by the San Joaquin
- California Department of Transportation (Caltrans) – Coordination with and/or permits from Caltrans may be required.
- Regional Water Quality Control Board (RWQCB) – Per Section 402 National Pollutant Discharge Elimination System (NPDES) permit compliance, any project that disturbs more than 10,000 square feet of land is required to obtain a permit for stormwater discharge under the NPDES program administered by the RWQCB. The proposed project would be required to obtain coverage under the program for construction phase and post-construction phase stormwater discharge and would be required to develop a Stormwater Pollution Prevention Plan (SWPPP).
- San Joaquin Council of Governments – The City of Manteca is a signatory to the San Joaquin County Multi-Species Habitat Conservation and Open Space Plan (SJMSCP), and typically requires all areas within the city limits to participate in the SJMSCP. Therefore, upon annexation of the proposed project to the City, the City would also require the project site to seek coverage under the SJMSCP. The San Joaquin Council of Governments would be required to process, review and approve requests to annex to the SJMSCP from the proposed project.



4.1 AESTHETICS

4.1 AESTHETICS

4.1.1 INTRODUCTION

The Aesthetics chapter of the EIR describes existing aesthetic resources in the area of the Hat Ranch Project (proposed project) and the broader region, and evaluates the potential aesthetic impacts of the proposed project. The California Environmental Quality Act (CEQA) describes the concept of aesthetic impacts in terms of scenic vistas, scenic resources (such as trees, rock outcroppings, and historic buildings within a State scenic highway), the existing visual character or quality of the project area, and light and glare impacts. The following impact analysis is based on information drawn from the City of Manteca General Plan¹ and the City of Manteca General Plan EIR.² In addition, portions of the impact analysis are based on a site visit that was conducted within the proposed project area by Raney Planning & Management, Inc.

In response to the Notice of Preparation (NOP), the City received comments related to aesthetics regarding the potential for the proposed two-story residences to reduce visibility of the horizon, potential impacts to the visual character of existing residences by the project, and potential adverse visual effects related to shading and construction waste.

The CEQA Guidelines note that comments received during the NOP scoping process can be helpful in “identifying the range of actions, alternatives, mitigation measures, and significant effects to be analyzed in depth in an EIR and in eliminating from detailed study issues found not to be important.” (CEQA Guidelines Section 15083.) Neither the CEQA Guidelines nor Statutes require a lead agency to respond directly to comments received in response to the NOP, but they do require the comments be considered. Consistent with these requirements, these comments have been carefully reviewed and considered by the City of Manteca and are reflected in the analysis of impacts in this chapter. Appendix B includes all NOP comments received. It should be noted that the purpose of the development standards set forth in Table 17.26.020-1 of the Manteca Municipal Code for the One-Family Dwelling Zoning District (R-1) is to provide adequate open space on each parcel to minimize shading and protect privacy. The maximum building height allowed within the R-1 zone allows for two-story houses. In addition, although construction waste could be deposited on-site during project construction, construction activities would be temporary, and therefore, not constitute a significant impact related to aesthetics.

4.1.2 EXISTING ENVIRONMENTAL SETTING

The following setting information provides an overview of the existing conditions of visual resources in the project region as well as the project site, which is located in a currently unincorporated area in San Joaquin County, southeast of the City of Manteca limits but within the City’s Sphere of Influence (SOI).

¹ City of Manteca. *Manteca General Plan 2023 Policy Document*. October 6, 2003.

² City of Manteca. *City of Manteca General Plan 2023 Environmental Impact Report*. Certified October 6, 2003.



Visual Character of the Region

The City of Manteca is located at the center of California's Central Valley and near the north end of the San Joaquin Valley. Typical of the Central Valley, the area surrounding the City is virtually flat. With the exception of views from highway overpasses that provide brief panoramic views, the entire Cityscape and surrounding landscape are viewed from a ground-level perspective. The terrain surrounding the City is characterized by agricultural uses, composed primarily of orchards, alfalfa, row crops, pasture, scattered rural residences, and dairies. The City limits features a mostly urbanized setting, consisting of commercial, residential, and industrial uses concentrated along the interchanges of State Route (SR) 99, which runs through the City in a north-to-south direction, and SR 120, which features an east-to-west layout within the City, as well as the City's arterial corridors. The remainder of the City's urban areas are composed of residential neighborhoods, including parks and schools.

The aesthetic qualities of the Sierra Nevada Mountains, the Coastal Mountain Range, and Mount Boardman are the primary visual landmarks in the region. The Sierra Nevada Mountains are located approximately 65 miles east of the City and visible on clear days. The Coastal Mountains, approximately 20 miles from the City, afford area residents a view to the west on clear days. In addition, Mount Boardman (part of the Coast Mountain Range) is approximately 23.4 miles away and visible to the southwest as part of the Coast Mountain Range.

State Scenic Highways

According to the California Department of Transportation's (Caltrans) list of designated and eligible scenic routes under the State Scenic Highway Program, the nearest State scenic highway to the proposed project is a 15.4-mile stretch of Interstate 580, located approximately 13.3 miles southwest of the project site.³

Visual Character of the Project Site and Surrounding Area

As mentioned, the proposed project site is located in a currently unincorporated area of San Joaquin County, southeast of the City limits, south of SR 120 and west of SR 99 (see Figure 3-1 in the Project Description chapter of this EIR). The site consists of three parcels totaling approximately 184.7 acres. For the purposes of this environmental analysis, the term "West Parcel" refers to the parcels to be developed to the west of Pillsbury Road, while the term "East Parcel" refers to the parcel to be developed to the east of Pillsbury Road.

The topography of the project site is relatively flat. The West Parcel is planted with vineyards. The East Parcel contains a 20,000-square-foot (sf) residence. Ornamental landscape vegetation borders the residence and includes lawn areas, trees, shrubs, perennial plants, and vines. A tree-lined driveway provides access to the residence from Sedan Avenue. The driveway starts at the project site's southeast corner, where it briefly travels north along the site's eastern perimeter, before pivoting at a 90-degree angle to enter the interior of the site and connect to the residence. Finally, two shop buildings are located in the southeast corner of the site.

Land to the north and west of the project site consists of low-density residential development associated with the Pillsbury Estates, Woodward Park, and Evans Estates communities. Lands directly south and east of the project site are planted with orchards (see Figure 3-2 in the Project Description chapter); however, the adjacent parcels are currently designated as Low-Density

³ California Department of Transportation. *Scenic Highways*. Available at: <https://dot.ca.gov/programs/design/lap-landscape-architecture-and-community-livability/lap-liv-i-scenic-highways>. Accessed December 2020.



Residential (LDR) by the City's existing General Plan. Areas further south of the proposed project would remain within the County and consist of agricultural uses.

Viewer Types

The following individuals or groups of individuals have views of the project site:

- Neighboring residents of the existing single-family residences to the north and west of the project site.
- Motorists who drive past the project site along Sedan Avenue, Pillsbury Road, and Mono Street. For the section of Sedan Avenue that runs by the southeastern corner of the project site, views are obscured by two shop buildings; thus, motorist views along this stretch of Sedan Avenue are limited.
- Pedestrians and bicyclists who travel along Sedan Avenue, Pillsbury Road, and Mono Street. Sedan Avenue does not include wide shoulders or sidewalks; thus, pedestrian and bicycle traffic along Sedan Avenue in the project vicinity is limited.

Public Versus Private Views

Travelers along nearby roadways and the nearby residences north and west of the project site would be considered sensitive visual receptors. However, it is important to distinguish between public and private views. Private views are views seen from privately owned land and are typically viewed by individual viewers, including views from private residences.

Public views are views that are experienced by the collective public. In the case of the proposed project, public views consist primarily of views from existing roadways in the vicinity of the project site as well as views from Pillsbury Park in the Pillsbury Estates neighborhood. CEQA case law has established that only public views, not private views, are protected under CEQA.

Existing Conditions of Key Viewpoints

The public viewpoints that could be most impacted by the proposed project's potential visual effects have been selected for in-depth analysis, including views from Sedan Avenue, Pillsbury Road, and Pillsbury Park (see Figure 4.1-1).

View 1: Existing Views from Sedan Avenue at Southeastern Corner of Project Site

Views towards the project site from Sedan Avenue, at the southeastern corner of the project site, are obstructed (see Figure 4.1-2). Several pine trees, road signs, and fencing are located in the foreground. The midground consists primarily of a pair of shop buildings, with a cluster of trees to the east of the structures. The viewshed also contains trees from the orchard on the parcel to the east of the site. The project site itself from this viewpoint is not perceptible. The developed nature of the viewshed is consistent with the transition from the agricultural landscape to the south of the project site to the urban residential neighborhoods to the north of the site.



**Figure 4.1-1
Locations of Existing Views Towards Hat Ranch Project Site**



Figure 4.1-2
Vantage Point #1 - Existing Views from Sedan Avenue at Southeast Corner of the Project Site



View 2: Existing Views from Sedan Avenue to the South of Project Site

Views towards the project site from Sedan Avenue, to the south of the project site, consist primarily of open fields with unobstructed views (see Figure 4.1-3). A field for row crops lies in the foreground. Starting in the foreground, utility poles and lines cut through the middle of the field in a north-south direction, growing less visible as the utility infrastructure reaches the background of the viewshed. The project site's existing residence is viewable along the distant horizon, with a line of trees along the driveway leading to the residence also viewable in the distance. The rural nature of the viewshed is consistent with the agricultural landscape to the south of the project site.

View 3: Existing Views from Pillsbury Road/Mono Street Intersection

Views towards the project site from the Pillsbury Road/Mono Street intersection consist of the aforementioned neighborhood roads and the northwest boundary of the project site's East Parcel in the foreground (see Figure 4.1-4). Just beyond the streets, fencing is located along the East Parcel's northern and western boundaries. The midground then includes vegetation associated with the project site's vineyards, followed by the viewshed's background, which includes the residence, ornamental landscape vegetation, and tree-lined driveway. To the west of the residence, a small cluster of pine trees and a longer row of palm trees, both located along Sedan Avenue, are discernible against the backdrop of the sky. The rural nature of the viewshed is consistent with the agricultural landscape to the south of the project site.

View 4: Existing Views from Pillsbury Park at Mono Street/Inyo Avenue Intersection

Views towards the project site from Pillsbury Park at the Mono Street/Inyo Avenue intersection consist of Pillsbury Park in the foreground, including the park's associated sidewalks, street signs, light poles, landscaped vegetation, and open lawn area (see Figure 4.1-5). The midground includes the park's scattered landscaping trees and playground equipment in the western area of the viewshed and single-family residences associated with the Pillsbury Estates neighborhood in the eastern areas of the viewshed. The background includes the project site's vineyards. The small cluster of pine trees and longer row of palm trees located along Sedan Avenue, further past the project site, are discernible against the backdrop of the sky. The urban nature of the viewshed is consistent with the residential neighborhoods located to the north and west of the project site.

Light Pollution and Glare

Light pollution refers to all forms of manmade light in the night sky, including glare, light trespass, sky glow, and excessive illumination at an intensity that is inappropriate. Views of the night sky can be an important part of the natural environment, particularly in communities surrounded by extensive open space. Excessive light and glare can also be visually disruptive to humans and nocturnal animal species.

The project site contains the existing residence, which would be considered a source of light or glare. Additionally, the project site is located within the vicinity of existing residential development to the north and west. Lighting associated with such development, as well as headlights from vehicles traveling on Sedan Avenue and the neighborhood roads of surrounding residential communities, contributes to the overall nighttime lighting environment of the project area.



Figure 4.1-3
Vantage Point #2 - Existing Views from Sedan Avenue South of the Project Site



Figure 4.1-4
Vantage Point #3 - Existing Views from Pillsbury Road/Mono Street Intersection



**Figure 4.1-5
Vantage Point #4 - Existing Views from Pillsbury Park at Mono Street/Inyo Avenue
Intersection**



4.1.3 REGULATORY SETTING

Applicable federal laws or regulations pertaining to the aesthetic quality of the project area do not exist. State and local laws and regulations applicable to the proposed project are listed below.

State Regulations

The following applicable State regulation pertains to aesthetic resources.

California Scenic Highway Program

The State Scenic Highway System includes a list of highways that are either eligible for designation as scenic highways or have been so designated. Such highways are identified in Section 263 et seq. of the California Streets and Highways Code.

Local Regulations

The following local environmental laws and policies apply to aesthetics.

City of Manteca General Plan 2023

The following goals and policies from the City of Manteca General Plan are related to aesthetic resources.

Community Design Element

Goal CD-1	Retain the compact and cohesive community form of the City.	
	Policy CD-P-6	Provide public spaces such as small parks and plazas, including a single plaza or City park that is recognized as the City center.
	Policy CD-P-7	The City shall implement neighborhood design standards in the Residential districts that contribute to the overall character of the neighborhood by emphasizing traditional residential features that enhance the sense of community, ensure a safe pedestrian orientation, and minimize the visual prominence of garages.
	Policy CD-I-3	Approve and apply neighborhood design standards.
Goal CD-2	Maintain a memorable City identity characterized by distinctive, high quality buildings and streetscapes.	
Goal CD-3	Establish distinct, attractive identities for neighborhoods, gateways and commercial areas.	
Goal CD-7	Develop attractive and memorable entries to Manteca.	
Goal CD-8	Upgrade and enhance the visual quality of Manteca's arterial and collector streets.	
	Policy CD-P-21	Provide parks and schools as distinct centers for neighborhoods.



Policy CD-P-22	Provide features that distinguish one neighborhood from another, such as natural features, entry gateways, street lighting, or signage.
Policy CD-P-24	The City shall ensure through design guidelines that the walls surrounding residential area neighborhoods are attractive and well designed.
Policy CD-P-25	The City shall encourage mixed land uses but provide physical separation or design buffers between incompatible land uses.
Policy CD-P-26	Residential neighborhoods shall be designed to provide access from the neighborhood streets to these open space corridors.
Policy CD-P-28	The City shall establish residential design guidelines and standards.
Policy CD-P-29	The City shall establish a street tree program for residential neighborhoods.
Policy CD-P-30	<p>Neighborhoods in new growth areas shall incorporate the following characteristics:</p> <ul style="list-style-type: none">• The edges of the neighborhood shall be identifiable by use of landscaped areas along major streets or natural features, such as permanent open space. Primary arterial streets may be used to define the boundaries of neighborhoods. The street system shall be designed to discourage high volume and high speed traffic through the neighborhood.• Neighborhoods shall be not more than one mile in length or width.• Each neighborhood shall include a distinct center, such as an elementary school, neighborhood park(s), and/or a mixed-use commercial area within a reasonable walking distance of the homes, approximately one-half mile.• Each neighborhood shall include an extensive pedestrian and bikeway system comprised of sidewalks and bike lanes along streets and dedicated trails.
Goal CD-9	Establish a durable, sustainable community that utilizes resources efficiently.
Policy CD-P-35	Architectural elements that contribute to a building's character, aid in climate control, and enhance pedestrian scale are encouraged. Examples include canopies, roof



overhangs, projections or recessions of stories, balconies, reveals, and awnings.

Policy CD-P-36 Encourage the creation of an urban forest comprised of street trees, residential lot trees, and trees in non-residential parking lots and other public open-space.

Goal CD-11 To the extent possible, new development shall retain or incorporate visual reminders of the agricultural heritage of the community.

Policy CD-P-44 Provide minimal levels of street, parking, building, site and public area lighting to meet safety standards and provide direction.

Policy CD-P-45 Provide directional shielding for all exterior lighting to minimize the annoyance of direct or indirect glare.

Policy CD-P-46 Provide automatic shutoff or motion sensors for lighting features in newly developed areas.

Resource Conservation Element

Goal RC-8 To provide adequate land for open space as a framework for urban development, to meet the passive recreation needs of the community, and to set aside wildlife habitat.

Policy RC-P-16 Provide public and private open-space within urbanized parts of Manteca, in order to provide visual contrast with the built environment and to provide for the recreational needs of residents.

Policy RC-P-17 Provide access to public open space areas.

Policy RC-P-18 New development shall maximize the potential for open-space and visual experiences.

City of Manteca Development Standards, Municipal Code Chapter 17.26

The City's Development Standards include requirements on lot area, allowed density, building setbacks, height, and lot coverage for each of the City's Base Zoning Districts. Section 17.26.040 establishes additional standards for small-lot single-family residential development. Additional site planning requirements (e.g., landscaping, lighting) are listed in Article III of the Municipal Code (Site Planning Standards). Development within the City is also subject to compliance with all adopted Uniform Building and Fire Codes.

City of Manteca Lighting Standards, Municipal Code Chapter 17.50

The purpose of the City's Lighting Standards is to regulate lighting to balance the safety and security needs for lighting with the City's desire to preserve dark skies and to ensure that light trespass and glare have negligible impact on surrounding property (especially residential) and roadways.



The City applies standards to all outdoor lighting, including standards on nuisance prevention, maintenance, shielding, level of illumination, maximum height of freestanding outdoor light fixtures, energy-efficiency, accent lighting, signs, sports fields and other outdoor activity areas, telecommunications towers, and alternative designs, materials, and installations.

4.1.4 IMPACTS AND MITIGATION MEASURES

The following section describes the standards of significance and methodology used to analyze and determine the proposed project's potential impacts related to aesthetics. A discussion of the project's impacts, as well as mitigation measures where necessary, is also presented.

Standards of Significance

Consistent with Appendix G of the CEQA Guidelines, an aesthetic impact is considered significant if the proposed project would:

- Have a substantial adverse effect on a scenic vista;
- Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a State scenic highway;
- In a non-urbanized area, 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) or, in an urbanized area, conflict with applicable zoning and other regulations governing scenic quality; or
- Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area.

Method of Analysis

The section below gives full consideration to the development of the project site and acknowledges the physical changes to the existing setting. Impacts to the existing environment of the project area are determined by the contrast between the site's visual setting before and after buildout of the proposed project. Although few standards exist to singularly define the various individual perceptions of aesthetic value from person to person, the degree of visual change can be measured and described in a reasonably objective manner in terms of visibility and visual contrast, dominance, and magnitude. The standards of significance listed above will be used to delineate the significance of any visual or aesthetic alterations of the site.

Additionally, an Illumination Summary was prepared for the proposed project by Musco Lighting to assess potential light and glare impacts associated with the proposed park in the project site's East Parcel. The Illumination Summary provides the proposed park's estimated horizontal illuminance and vertical illuminance, as measured in footcandle units. Horizontal illuminance describes the amount of light landing on a horizontal surface, such as the ground. Vertical illuminance refers to the amount of light landing on a vertical surface, such as a wall. The Illumination Summary assumed a lighting system comprised of six light poles, each at a height of 80 feet and containing five fixtures. Fixtures were assumed to include LED light sources emitting 160,000 lumens. Measurements were conducted according to the Illuminating Engineering Society's (IES) IESNA RP-6-15 standard.

Project-Specific Impacts and Mitigation Measures

The following discussion of impacts related to aesthetics is based on implementation of the proposed project in comparison to existing conditions and the standards of significance presented above.



4.1-1 Have a substantial adverse effect on a scenic vista. Based on the analysis below, the impact is *less than significant*.

A scenic vista can be defined as a viewpoint that provides expansive views of a highly valued landscape for the benefit of the general public. Typical scenic vistas include mountain ranges, ridgelines, or bodies of water as viewed from a highway, public space, or other area designated for the express purpose of viewing and sightseeing. In general, a project's impact to a scenic vista would occur if development of the project would substantially change, remove, or impede the view of a scenic vista. Pursuant to the Manteca General Plan, the General Plan planning area, including the project site, does not contain officially designated scenic vista viewpoints. In addition, as discussed under Impact 4.1-2, officially designated State scenic highways are not located within the vicinity of the City limits.

Based on the above information, because established scenic vistas are not located on or adjacent to the project site, the proposed project would not have a substantial adverse effect on a scenic vista, and the project would result in a ***less-than-significant*** impact.

Mitigation Measure(s)

None required.

4.1-2 Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a State scenic highway. Based on the analysis below, the impact is *less than significant*.

According to Caltrans's list of designated and eligible scenic routes under the State Scenic Highway Program, the nearest State scenic highway to the proposed project is a 15.4-mile stretch of Interstate 580, located approximately 13.3 miles southwest of the project site. As such, the proposed project is not located within the vicinity of a State scenic highway. Furthermore, scenic resources, such as rock outcroppings and historic buildings, do not exist on the project site. While the project site includes a large residence and two shop buildings, as discussed in Chapter 4.5, Cultural and Tribal Cultural Resources of this EIR, the existing structures on the project site were not constructed more than 45 years ago. In fact, County records and aerial photos suggest the structures were constructed in 1995, at the earliest. Therefore, the existing on-site structures do not qualify as historic buildings.

Based on the above information, the proposed project would not substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a State scenic highway. As such, a ***less-than-significant*** impact would occur.

Mitigation Measure(s)

None required.



4.1-3 In a non-urbanized area, 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) or, in an urbanized area, conflict with applicable zoning and other regulations governing scenic quality. Based on the analysis below, the impact is considered *less than significant*.

Generally, the project site is adjacent to an urbanized area. The areas north and west of the site are within the City limits and built out with the single-family residential communities of Pillsbury Estates, Woodward Park, and Evans Estates. Nevertheless, given the existing conditions of the project site and the rural nature of the existing agricultural lands within San Joaquin County south of the project site, the analysis herein considers the project site to be non-urbanized.

The proposed project would convert the project site's existing agricultural uses to primarily single-family residential uses. Changes to public views of the site that would occur as a result of the proposed project are discussed below.

View from Sedan Avenue at Southeastern Corner of the Project Site

With development of the proposed project, views of the project site from View 1 (see Figure 4.1-2) would change from the existing view of pine trees, road signs, fencing, and shop building facades to a single-family residential community.

The project site currently consists predominantly of vineyards, and also contains an on-site residence, tree-lined driveway, and associated structures. As such, the visual character of the site is currently defined by the rural landscape. Development of the proposed project would permanently change the view to urban landscaping. However, due to the presence of the aforementioned existing obstructions, development of the proposed project would not substantially degrade the quality of existing public views of the site from View 1.

Based on the above, the existing visual character and quality of public views of the project site from Sedan Avenue at the southeastern corner of the project site would not be considered to be substantially degraded by the proposed project.

View from Sedan Avenue South of the Project Site

With development of the proposed project, views of the project site from View 2 (see Figure 4.1-3) would maintain the existing views of row crops immediately north of the road; however, views of the project site's rural landscape would change to an urban single-family residential community.

As discussed above, existing views from Sedan Avenue south of the project site contain the existing on-site vineyards, residence, and tree-lined driveway. Through development of the proposed project, the view would change to that of the future Antone Raymus Parkway and proposed residences. However, pursuant to the proposed Planned Development (PD) standards, which are subject to review and approval by the City of Manteca, the project would include a six-foot-tall masonry wall



along the Antone Raymus Parkway frontage, which would screen views of the proposed residences. The masonry wall would incorporate stone and plaster elements to minimize adverse visual effects to the environment. In addition, vines would be planted along the masonry wall's streetside veneer, which would further reduce potential adverse visual effects generated by the project. Furthermore, the Antone Raymus Parkway frontage would include a landscaped corridor consisting of shrubs, trees, and drought-tolerant groundcover.

As previously discussed, the proposed project would be consistent with applicable policies set forth in the City's General Plan. For example, the project's aforementioned visual components would ensure consistency with General Plan Policy CD-P-29, which pertains to the City's street tree program for residential neighborhoods. In addition, the proposed PD standards for the single-family residences would conform with the maximum allowed building height of 30 feet and the minimum setback areas set forth by the City's R-1 standards. The proposed PD standards for the half-plex units would be slightly adjusted to maintain a density between 2.1 du/ac and eight du/ac; however, the maximum building height for the half-plex units would be consistent with the single-family residences. While the minimum setbacks for the half-plex units would be reduced, relative to the R-1 standards, the front setbacks would still be required to be a minimum of 15 feet, side setbacks would primarily be five feet, and rear setbacks would range between five feet and 10 feet. Compliance with the approved PD development standards would ensure views of visual landmarks in the region are unaffected by the proposed project. Finally, although the site, itself, is considered to currently be non-urbanized, the site is adjacent to an urbanized portion of the City and public views of the project site from Sedan Avenue would be temporary, occurring only briefly as motorists, pedestrians, and cyclists pass by the site.

Overall, the proposed project would be consistent with the proposed PD standards, as well as applicable General Plan policies and Manteca Municipal Code development standards for the R-1 zoning district. Therefore, the existing visual character of the site would not be significantly altered.

Based on the above, the existing visual character and quality of public views of the project site from Sedan Avenue south of the site would be considered to not be substantially degraded by the proposed project.

View from the Pillsbury Road/Mono Street Intersection North of the Project Site

With development of the proposed project, views of the project site from View 3 (see Figure 4.1-4) would change from the existing rural landscape to an urban single-family residential community.

As discussed above, View 3 currently affords midground views of the on-site vineyards, with the existing residence, ornamental landscape vegetation and tree-lined driveway present in the background. Following development of the proposed project, the view would change to that of the proposed residences along Pillsbury Road and Mono Street. However, pursuant to the proposed PD standards, which require City approval, the backyards of the proposed residences would be screened along the aforementioned neighborhood roadways by enhanced wood or vinyl fencing. In



addition, side yards would feature landscaping, which would provide additional screening. Combined, the fencing and landscaping would serve to minimize adverse visual effects to the environment.

In addition, as detailed above, the proposed project would be consistent with applicable policies set forth in the City's General Plan, such as General Plan Policy CD-P-29, and applicable standards for R-1 development, including not exceeding the maximum allowed building height of 30 feet. Furthermore, the site is adjacent to an urbanized portion of the City and public views of the project site from the Pillsbury Road/Mono Street intersection would be temporary, occurring only briefly as motorists, pedestrians, and cyclists pass by the site.

Overall, the proposed project would be consistent with the PD standards proposed for the project, which are subject to City approval, as well as applicable General Plan policies and Manteca Municipal Code development standards for the R-1 zoning district. Therefore, the existing visual character of the site would not be significantly altered.

Based on the above, the existing visual character and quality of public views of the project site from the Pillsbury Road/Mono Street intersection north of the site would not be considered to be substantially degraded by the proposed project.

View from Pillsbury Park at the Mono Street/Inyo Avenue Intersection North of the Project Site

With development of the proposed project, views of the project site from View 4 (see Figure 4.1-5) would change from the existing rural landscape to an urban single-family residential community.

Similar to the analysis of potential project impacts to View 3, the proposed project would change the existing views of the on-site vineyards to that of the proposed residences along the Inyo Avenue and Jigsaw Avenue extensions, as well as views of the proposed park site west of the proposed Pillsbury Road extension (West Neighborhood Park). The West Neighborhood Park would feature neighborhood entry signage elements, in accordance with applicable City standards. In addition, the proposed residences would be designed consistent with the proposed PD standards, which require City approval. Consistency with applicable standards would serve to minimize adverse visual effects to the environment.

In addition, as detailed above, the proposed project would be consistent with all applicable policies set forth in the City's General Plan, such as General Plan Policy CD-P-29, and applicable standards for R-1 development, including not exceeding the maximum allowed building height of 30 feet. Furthermore, the project site is adjacent to an urbanized portion of the City and public views of the site from the Pillsbury Park would be temporary, occurring only briefly as motorists, pedestrians, and cyclists pass by the site.

Overall, the proposed project would be consistent with the City-approved PD standards for the project, as well as applicable General Plan policies and Manteca



Municipal Code development standards for the R-1 zoning district. Therefore, the existing visual character of the site would not be significantly altered.

Based on the above, the existing visual character and quality of public views of the project site from Pillsbury Park north of the site would not be considered substantially degraded by the proposed project.

Conclusion

Based on the proposed project's built-in features to ease the visual transition from the agricultural lands south of the site to the site, itself, (i.e., extensive landscaping within and along the borders of the project site), the analysis above demonstrates that while the proposed single-family residential development would result in changes to the existing visual character of the project site from existing public vantage points, the proposed project would not substantially degrade the character of a site having high visual quality. Therefore, a ***less-than-significant*** impact would occur.

Mitigation Measure(s)

None required.

4.1-4 Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area. Based on the analysis below, the impact is considered *less than significant*.

As noted previously, the project site is primarily characterized by the existing vineyards and residence, which is considered a minor source of light or glare, due to interior lighting visible through windows. Additionally, the residential communities located immediately to the north and west of the project site contribute to the project vicinity's lighting and glare, as the neighborhoods currently contribute night lighting in the form of exterior light sources such as porch and patio lights, architectural accent lighting, driveway lighting, landscape lighting, lighting from vehicles on neighborhood roadways, and interior lighting visible through windows.

The proposed project would introduce new sources of light and glare through the project's residences, neighborhood parks, school, and roadway improvements. The East Parcel's proposed park is noteworthy, as the park would include light poles to accommodate night activities on the park's soccer field, located to the west of the proposed school. Therefore, to assess potential light and glare impacts associated with the park, the Illumination Summary prepared for the proposed project estimated the park's horizontal illuminance and vertical illuminance in footcandle units, as detailed in the Method of Analysis section above. A footcandle is equal to one lumen per square foot. Light from the park would be expected to encroach only upon a small number of the proposed residences (approximately 10 residences) located immediately to the west of the soccer field. However, the maximum horizontal illuminance experienced by the residences would be only 0.02 footcandle (see Figure 4.1-6). Similarly, the maximum vertical illuminance at the residences would be only 0.07 footcandle (see Figure 4.1-7). Such a small amount of illuminance would not be considered a substantial amount of light. For comparison's sake, the IES' recommended level of horizontal and vertical illuminance for a parking lot in an urban



setting is 1 footcandle and 0.6 footcandle, respectively. Therefore, lighting associated with the proposed park would not be substantial at the proposed residences.

Furthermore, the proposed project's compliance with all applicable standards and regulations would ensure the park's lighting would not impact nearby residences. For instance, as part of the permit-approval process, the proposed project would be required to comply with the City's General Lighting Standards as set forth in Section 17.50.060 of the Municipal Code. The standards require sports fields and outdoor activity areas to mount, aim, and shield lighting fixtures so that the light falls within the primary playing area, ensuring only an insignificant amount of off-site light trespass is capable of being produced. Additionally, lights must be turned off within one hour of the end of an event at the sports field. With respect to shielding, the standards require all outdoor lighting to be constructed with full shielding and/or to be recessed to reduce light trespass to adjoining properties. Finally, outdoor lighting must be designed to illuminate at the minimum level necessary for safety and security and to avoid the harsh contrasts in lighting levels between a project site and adjacent properties. The proposed project's required compliance with the City's General Lighting Standards would ensure the project does not create a substantial source of light or glare.

The Manteca General Plan EIR concluded that with implementation of goals and policies, light and glare from new development that is contiguous with existing development would be less than significant. As previously discussed, development of the project site would be contiguous and consistent with surrounding residential lighting, and therefore, would be consistent with the conclusions of the General Plan EIR. Based on the above, the proposed project would not create a new source of substantial light or glare that would adversely affect day or nighttime views in the area. Therefore, the project would result in a ***less-than-significant*** impact.

Mitigation Measure(s)

None required.

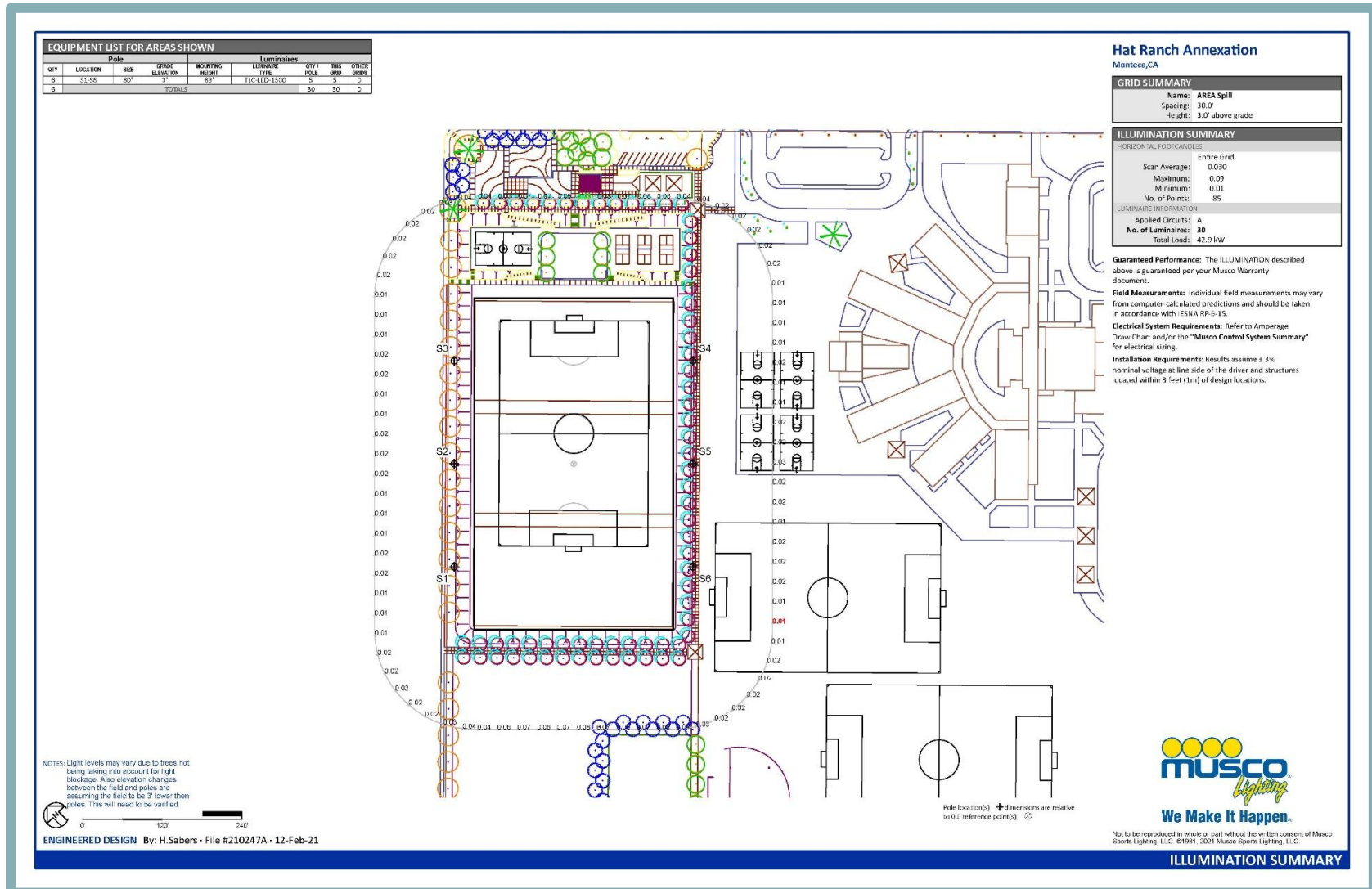
Cumulative Impacts and Mitigation Measures

As defined in Section 15355 of the CEQA Guidelines, "cumulative impacts" refers to two or more individual effects which, when considered together, are considerable, compound, or increase other environmental impacts. The individual effects may be changes resulting from a single project or a number of separate projects. The cumulative impact from several projects is the change in the environment that results from the incremental impact of the project when added to other closely related past, present, and reasonably foreseeable probable future projects.

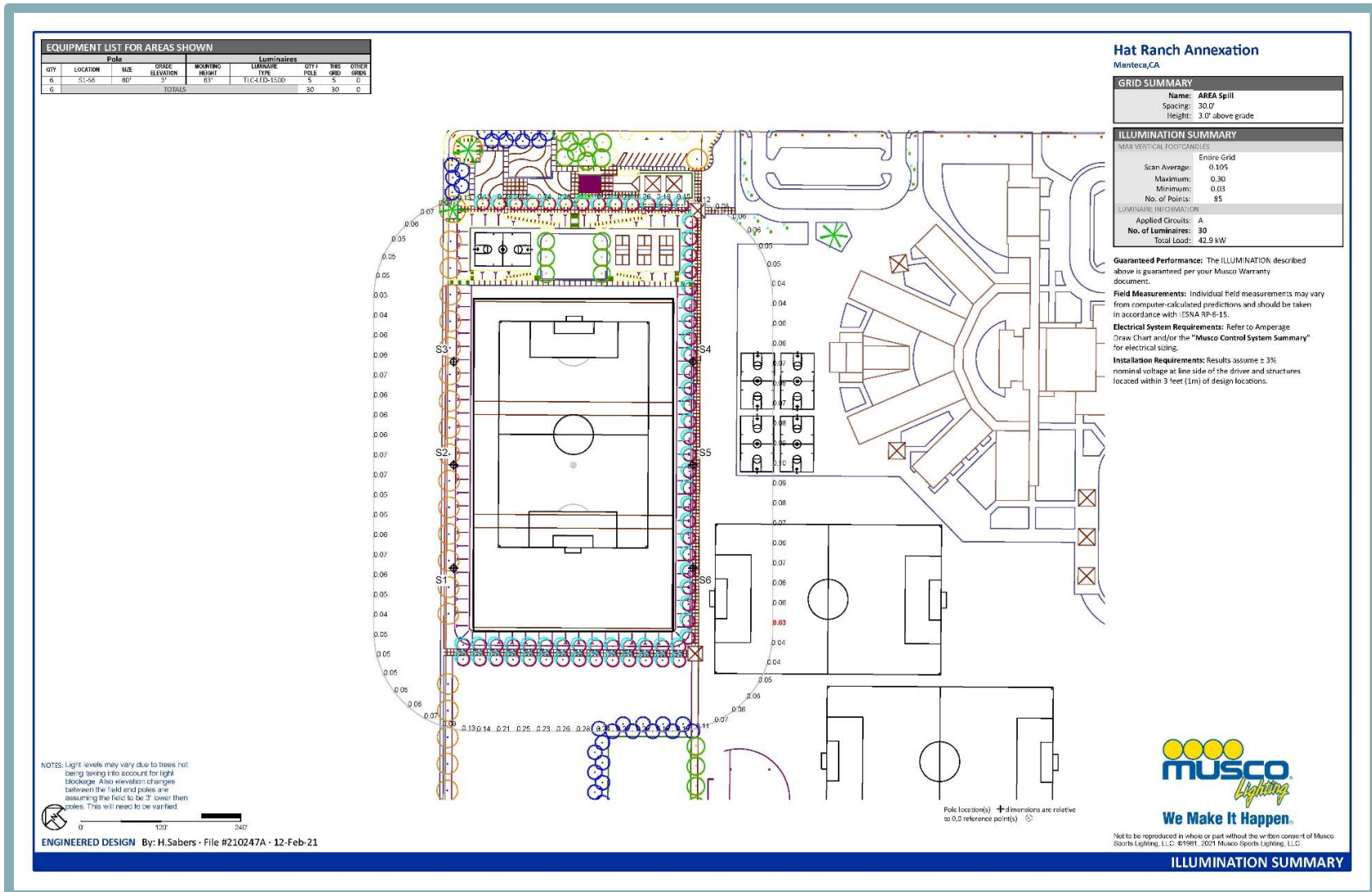
Some types of impacts to aesthetic resources are localized and not cumulative in nature. For example, the creation of glare or shadows at one location is not worsened by glare or shadows created at another location. Rather these effects are independent, and the determination as to whether they are adverse is specific to the project and location where they are created. Projects that block a view or affect the visual quality of a site also have localized aesthetic impacts. The impact occurs specific to a site or area and remains independent from another project elsewhere that may block a view or degrade the visual environment of a specific site.



**Figure 4.1-6
Hat Ranch East Parcel Park Horizontal Illuminance**



**Figure 4.1-7
Hat Ranch East Parcel Park Vertical Illuminance**



Two types of aesthetic impacts may be additive in nature and thus cumulative, including night sky lighting and overall changes in the visual environment as the result of increasing urbanization of large areas. As development in one area increases and possibly expands over time and meets or connects with development in an adjoining exurban area, the effect of night sky lighting experienced outside of the region may increase in the form of larger and/or more intense nighttime glow in the viewshed.

Similarly, as development in one area changes from rural to urban, and this pattern continues to occur throughout the undeveloped areas of a jurisdiction, the changes in visual character may become additive and cumulatively considerable. The proposed project's incremental contribution to night sky lighting and changes in visual character are addressed below.

4.1-5 Long-term changes in visual character associated with cumulative development of the proposed project in combination with future buildout of the City of Manteca General Plan Study Area. Based on the analysis below, the project's incremental contribution to this significant cumulative impact is *less than cumulatively considerable*.

Implementation of the proposed project, in combination with other development within the project vicinity, could degrade the visual character of the region surrounding the project site. Low-density residential development associated with the Pillsbury Estates, Woodward Park, and Evans Estates communities is located to the north and the west of the project site, while lands directly south and east are planted with orchards. Notably, the lands south and east of the project site are currently designated as LDR by the City's existing General Plan. Thus, development to the south and east of the project site is reasonably foreseeable in the future. Specifically, the City has approved approximately 1,036 acres adjacent to the project site's eastern boundary for development of the Austin Road Business Park and Residential Community (ARBPRC), which, at buildout, would include 92.9 acres of general commercial uses, 83.9 acres of commercial mixed use, 65.1 acres for a business industrial park, 275.2 acres of heavy industrial uses, 18.2 acres of public/quasi-public uses, 30.2 acres of park land, and 33.2 acres of open space.

As discussed above, the project site contains approximately 184.7 acres of existing agricultural land, and would convert vineyards and a large residence into residential housing, a school, and park land. While future development of land surrounding the project site would result in the loss of agricultural land, such projects would be required to analyze all environmental issue areas as required under CEQA. The General Plan EIR assessed potential impacts to aesthetics and visual resources that would occur as a result of buildout of the General Plan Study Area, and concluded that even with compliance with all applicable General Plan policies, buildout would result in significant and unavoidable impacts to existing scenic vistas and the existing visual character or quality of the Study Area. Therefore, the cumulative impact would be significant.

As further discussed in Chapter 6 of this EIR, CEQA Guidelines, Section 15064, Subdivision (h)(5) states, "[...]the mere existence of significant cumulative impacts caused by other projects alone shall not constitute substantial evidence that the proposed project's incremental effects are cumulatively considerable." Therefore,



even where cumulative impacts are significant, any level of incremental contribution is not necessarily deemed cumulatively considerable. The above discussion provides substantial evidence that, while the combined effects on aesthetics and visual resources resulting from approved planned development throughout the southern portion of the City limits and in unincorporated areas south of the City would be significant, the proposed project would only incrementally contribute to the significant cumulative effect.

As discussed under Impact 4.1-3, pursuant to the proposed PD standards, which are subject to review and approval by the City, the project would include a six-foot-tall masonry wall along the Antone Raymus Parkway frontage, which would screen views of the proposed residences, and the Antone Raymus Parkway frontage would include a landscaped corridor consisting of shrubs, trees, and drought-tolerant groundcover. In addition, the proposed PD standards for the single-family residences would conform with the maximum allowed building height and the minimum setback areas set forth by the City's R-1 standards, and the maximum building height for the half-plex units would be consistent with the single-family residences. Compliance with the approved PD development standards would ensure views of visual landmarks in the region are unaffected by the proposed project. Furthermore, the proposed project would be consistent with the residential land uses located immediately to the north and west of the property, and would be designed in accordance with all applicable General Plan policies and Municipal Code regulations.

Given that similar agricultural lands in the area of the project site exist in significant quantities to the south of the City, the project's incremental contribution to the significant cumulative loss of visual resources provided by agricultural lands within and immediately adjacent to the project site would be ***less than cumulatively considerable***.

Mitigation Measure(s)

None required.

4.1-6 Creation of new sources of light or glare associated with cumulative development of the proposed project in combination with future buildout of the City of Manteca General Plan Study Area. Based on the analysis below, the cumulative impact is *less than significant*.

Cumulative effects of lighting are visible over a wide area, due to the potential for lighting from a number of projects to create sky glow. Cumulative development, particularly conversion of rural or currently vacant sites to urban uses, would increase the sources of light and glare, which would have the potential to contribute to sky glow in the area. The General Plan EIR analyzed the potential for buildout of the General Plan Study Area to result in increases of light and glare and concluded that impacts would be minimized by incorporating design features and operating requirements into new development that limit light and glare on-site. In support of the conclusion, the General Plan EIR cited policies in the Community Design Element that serve to mitigate the degradation of the night sky in the City. Policy CD-P-44 requires new development to implement only the minimal levels of street, parking, building, site, and



public area lighting necessary for meeting safety standards and providing direction. Policy CD-P-45 requires directional shielding for all exterior lighting to minimize the annoyance of direct or indirect glare. Policy CD-P-46 requires automatic shutoff or motion sensors for lighting features in newly developed areas. The above policies are enforced through Section 17.50.060 of the Municipal Code, which establishes the City's General Lighting Standards. With implementation of all applicable policies and standards, the General Plan EIR concluded that all light and glare impacts associated with buildout of the Study Area would be reduced to a less-than-significant level.

As discussed under Impact 4.1-4, the proposed project would introduce new sources of light and glare through the project's residences, neighborhood parks, school, and roadway improvements. Notably, the East Parcel's proposed park would include light poles to accommodate night activities on the park's soccer field. However, light from the park would not encroach upon existing residences in the project vicinity. Only a small number of the proposed residences would experience illumination, and as shown in Figure 4.1-6 and Figure 4.1-7, the lighting would not be substantial. Furthermore, the proposed project would be required to comply with the City's General Lighting Standards, which would ensure the project does not create a substantial source of light or glare in the project vicinity. Additionally, all future development within or to be annexed into the City would be subject to the General Lighting Standards. Thus, similar to the proposed project, each individual future project's light and glare would not be anticipated to be substantial and would not significantly contribute to sky glow in the region.

Based on the above, through adherence to all applicable policies and standards set forth in the General Plan and Municipal Code, the proposed project in combination with future buildout of the General Plan Study Area would not create new sources of substantial light and glare. Therefore, the cumulative impact would be ***less than significant***.

Mitigation Measure(s)

None required.



4.2 AGRICULTURAL RESOURCES

4.2 AGRICULTURAL RESOURCES

4.2.1 INTRODUCTION

This chapter of the EIR summarizes the existing agricultural resources within the boundaries of the Hat Ranch project site using the current State Department of Conservation (DOC) model and data, including identification of any Prime Farmland, Unique Farmland, or Farmland of Statewide Importance within the project boundaries. The analysis addresses the conversion of lands to residential uses, as well as any conflicts with existing zoning for agricultural use or right-to-farm ordinances. Further, this chapter outlines the policies and standards set by the San Joaquin Local Agency Formation Commission (LAFCo) regarding agricultural resources, and analyzes the project's consistency with those policies. Documents referenced to prepare this chapter include the Manteca General Plan,¹ the Manteca General Plan EIR,² the United States Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) Web Soil Survey,³ the *Soil Survey of San Joaquin County, California*,⁴ and the Cortese-Knox-Hertzberg Local Government Reorganization Act of 2000.⁵

In response to the Notice of Preparation (NOP), the City received comments related to agricultural resources regarding the potential for the proposed project to convert existing agricultural land to urban uses, the use of permanent agricultural conservation easements as partial compensation for the loss of agricultural land, and incremental impacts to agricultural land that would lead to cumulative impacts. The comments have been carefully reviewed and considered by the City of Manteca and are reflected in the analysis of impacts in this chapter.

4.2.2 EXISTING ENVIRONMENTAL SETTING

The Existing Environmental Setting section describes current farmland and soil productivity classification systems, as well as the extent and quality of the agricultural resources present on the project site.

Farmland Classifications

The NRCS uses two systems to determine a soil's agricultural productivity: 1) the Soil Capability Classification; and 2) the Storie Index Rating System. The "prime" soil classification of both systems indicates the presence of few to no soil limitations, which if present, would require the application of management techniques (e.g., drainage, leveling, special fertilizing practices) to enhance production. The Farmland Mapping and Monitoring Program (FMMP), part of the DOC

¹ City of Manteca. *Manteca General Plan 2023 Policy Document*. October 6, 2003.

² City of Manteca. *Manteca General Plan 2023 Environmental Impact Report*. October 6, 2003.

³ United States Department of Agriculture, National Resources Conservation Service. *Web Soil Survey*. Accessed November 30, 2020.

⁴ United States Department of Agriculture, Soil Conservation Service. *Soil Survey of San Joaquin County, California*. October 1992.

⁵ California Legislative Information. *Cortese-Knox-Hertzberg Local Government Reorganization Act of 2000 [56000-57550]*. Available at: [leginfo.legislature.ca.gov/faces/codes_displaySection.xhtml?lawCode=GOV§ionNum=56064](https://leginfo.ca.gov/faces/codes_displaySection.xhtml?lawCode=GOV§ionNum=56064). Accessed January 2021.



Division of Land Resource Protection (DLRP), uses the information from the NRCS to create maps illustrating the types of farmland in the area.

Soil Capability Classification

The Soil Capability Classification System takes into consideration soil limitations, the risk of damage when soils are used, and the way in which soils respond to treatment. Capability classes range from Class I soils, which have few limitations for agriculture, to Class VIII soils, which are unsuitable for agriculture. Generally, as the rating of the capability classification system increases, the yields and profits are difficult to obtain. A general description of soil classification, as defined by the NRCS, is provided in Table 4.2-1.

Table 4.2-1 Soil Capability Classification	
Class	Definition
I	Soils have few limitations that restrict their use.
II	Soils have moderate limitations that reduce the choice of plants, or that require special conservation practices.
III	Soils have severe limitations that reduce the choice of plants, require conservation practices, or both.
IV	Soils have very severe limitations that reduce the choice of plants, require very careful management, or both.
V	Soils are not likely to erode but have other limitations; impractical to remove and limit their use largely to pasture or range, woodland, or wildlife habitat.
VI	Soils have severe limitations that make them generally unsuited to cultivation and limit their use largely to pasture or range, woodland, or wildlife habitat.
VII	Soils have very severe limitations that make them unsuited to cultivation and that restrict their use largely to pasture or range, woodland, or wildlife habitat.
VIII	Soils and landforms have limitations that preclude their use for commercial plants and restrict their use to recreation, wildlife habitat, or water supply or to aesthetic purposes.
<i>Source: USDA Soil Conservation Service, Soil Survey of San Joaquin County, 1992</i>	

Storie Index Rating System

The Storie Index Rating system ranks soil characteristics according to their suitability for agriculture from Grade 1 soils (80 to 100 rating), which do not have limitations or have few limitations for agricultural production, to Grade 6 soils (less than 10), which are not suitable for agriculture. Under this system, soils deemed less than prime could function as prime soils when limitations such as poor drainage, slopes, or soil nutrient deficiencies are partially or entirely removed. The six grades, ranges in index rating, and definition of the grades, as defined by the NRCS, are provided in Table 4.2-2, Storie Index Rating System.

Farmland Mapping and Monitoring Program

The DOC established the FMMP in 1982 to continue the Important Farmland mapping efforts begun in 1975 by the USDA Soil Conservation Service (USDA-SCS). The intent of the USDA-SCS was to produce agriculture maps based on soil quality and land use across the nation. As part of the nationwide agricultural land use mapping effort, the USDA-SCS developed a series of definitions known as Land Inventory and Monitoring (LIM) criteria. The LIM criteria classified the land's suitability for agricultural production; suitability included both the physical and chemical characteristics of soils and the actual land use. Important Farmland Maps are derived from the USDA-SCS soil survey maps using the LIM criteria.



**Table 4.2-2
Storie Index Rating System**

Grade	Index Rating	Definition
1 – Excellent	80 through 100	Soils are well suited to intensive use for growing irrigated crops that are climatically suited to the region.
2 – Good	60 through 79	Soils are good agricultural soils, although they may not be so desirable as Grade 1 because of moderately coarse, coarse, or gravelly surface soil texture; somewhat less permeable subsoil; lower plant available water holding capacity, fair fertility; less well drained conditions, or slight to moderate flood hazards, all acting separately or in combination.
3 – Fair	40 through 59	Soils are only fairly well suited to general agriculture use and are limited in their use because of moderate slopes; moderate soils depths; less permeable subsoil; fine, moderately fine or gravelly surface soil textures; poor drainage; moderate flood hazards; or fair to poor fertility levels, all acting alone or in combination.
4 – Poor	20 through 39	Soils are poorly suited. They are severely limited in their agricultural potential because of shallow soil depths; less permeable subsoil; steeper slope; or more clayey or gravelly surface soil texture than Grade 3 soils, as well as poor drainage; greater flood hazards; hummocky micro-relief; salinity; or poor fertility levels, all acting alone or in combination.
5 – Very Poor	10 through 19	Soils are very poorly suited for agriculture, are seldom cultivated and are more commonly used for range, pasture, or woodland.
6 – Non-agriculture	Less and 10	Soils are not suited for agriculture at all due to very severe to extreme physical limitations, or because of urbanization.

Source: USDA Soil Conservation Service, Soil Survey of San Joaquin County, 1992.

Since 1980, the State of California has assisted the USDA-SCS with completing mapping in the State. The FMMP was created within the DOC to carry on the mapping activity on a continuing basis, and with a greater level of detail. The DOC applied a greater level of detail by modifying the LIM criteria for use in California. The LIM criteria in California utilizes the SCS and Storie Index Rating systems, but also considers physical conditions such as dependable water supply for agricultural production, soil temperature range, depth of the groundwater table, flooding potential, rock fragment content and rooting depth.

Important Farmland Maps for California are compiled using the modified LIM criteria (as described above) and current land use information. The minimum mapping unit is 10 acres unless otherwise specified. Units of land smaller than 10 acres are incorporated into surrounding classifications. The Important Farmland Maps identify seven agriculture-related categories: Prime Farmland, Farmland of Statewide Importance, Unique Farmland, Farmland of Local Importance, Grazing Land, Urban and Built-up Land (Urban Land), and Other Land. Each is summarized below, based on a *Guide to Farmland Mapping and Monitoring Program* (1998), prepared by the DOC.⁶

⁶ California Department of Conservation. *Important Farmland Categories*. Available at: <https://www.conservation.ca.gov/dlrp/fmmp/Pages/Important-Farmland-Categories.aspx>. Accessed April 2022.



- **Prime Farmland:** Prime Farmland is land with the best combination of physical and chemical features able to sustain the long-term production of agricultural crops. This land has the soil quality, growing season, and moisture supply needed to produce sustained high yields. The land must have been used for the production of irrigated crops at some time during the two update cycles (a cycle is equivalent to two years) prior to the mapping date of 1998 (or since 1994).
- **Farmland of Statewide Importance:** Farmland of Statewide Importance is land similar to Prime Farmland, but with minor shortcomings, such as greater slopes or with less ability to hold and store moisture. The land must have been used for the production or irrigated crops at sometime during the two update cycles prior to the mapping date (or since 1994).
- **Unique Farmland:** Unique Farmland is land of lesser quality soils used for the production of the State's leading agricultural crops. This land is usually irrigated, but may include non-irrigated orchards or vineyards, as found in some climatic zones in California. The land must have been cultivated at some time during the two update cycles prior to the mapping date (or since 1994).
- **Farmland of Local Importance:** Farmland of Local Importance is land of importance to the local agricultural economy, as determined by each county's Board of Supervisors and a local advisory committee. San Joaquin County Local Farmland includes lands which do not qualify as Prime, Statewide, or Unique designation, but are currently irrigated crops or pasture or non-irrigated crops; lands that would meet the Prime or Statewide designation and have been improved for irrigation, but are now idle; and lands that currently support confined livestock, poultry operations and aquaculture.
- **Grazing Land:** Grazing Land is land on which the existing vegetation, whether grown naturally or through management, is suited to the grazing of livestock. The minimum mapping unit for this category is 40 acres.
- **Urban and Built-up Land:** Urban and Built-up Land is occupied with structures with a building density of at least one unit to one-half acre. Uses may include but are not limited to, residential, industrial, commercial, construction, institutional, public administration purposes, railroad yards, cemeteries, airports, golf courses, sanitary landfills, sewage treatment plants, water control structures, and other development purposes. Highways, railroads, and other transportation facilities are mapped as part of this unit, if they are part of a surrounding urban area.
- **Other Land:** Other Land is land that is not included in any other mapping categories. The following uses are generally included: rural development, brush timber, government land, strip mines, borrow pits, and a variety of other rural land uses.

According to Table 4.B-4 in the San Joaquin County 2035 General Plan EIR, the County consists of 385,337 acres of Prime Farmland; 83,307 acres of Farmland of Statewide Importance; 69,481 acres of Unique Farmland; 76,869 acres of Farmland of Local Importance; and 139,235 acres of Grazing Land.⁷

Project Site Characteristics

According to the Soil Survey of San Joaquin County, the project site is made up of Delhi fine sand (approximately 16.4 percent), Delhi loamy sand (approximately 67.2 percent), and Tinnin loamy coarse sand (approximately 16.4 percent) (see Figure 4.2-1). Table 4.2-3 lists the characteristics

⁷ San Joaquin County. *San Joaquin County 2035 General Plan Environmental Impact Report* [pg. 4.B-4]. December 2016.



of the Delhi fine sand, Delhi loamy sand, and Tinnin loamy coarse sand soil types as determined in the Soil Survey of San Joaquin County (1992).

Table 4.2-3 On-Site Soil Capability Classification and Storie Index Rating			
Soil Map Symbol and Name	Soil Capability Classification	Storie Index Rating	Grade
Delhi fine sand, 0 to 5 percent slopes	III _s -4, irrigated, IV _e -4, nonirrigated	16.6	3
Delhi loamy sand, 0 to 2 percent slopes	III _s -4, irrigated, IV _e -4, nonirrigated	68.3	2
Tinnin loamy coarse sand	III _s -4, irrigated, IV _e -4, nonirrigated	15.2	3
Source: USDA Soil Conservation Service, Soil Survey of San Joaquin County, 1992.			

In addition, pursuant to the DOC Important Farmland Finder, the project site is predominantly composed of Farmland of Statewide Importance (see Figure 4.2-2). The remainder of the site, 13.1 acres associated with the existing on-site residence, is designated as “Semi-agricultural and Rural Commercial Land.”

4.2.3 REGULATORY SETTING

Federal laws or regulations pertaining to agricultural resources are not applicable for this analysis. The existing State and local laws and regulations pertaining to such resources are listed below, as applicable.

State Regulations

The following are applicable State regulations related to agricultural resources.

California Land Conservation Act – Williamson Act

The California Land Conservation Act, better known as the Williamson Act, has been the State’s premier agricultural land protection program since the act’s enactment in 1965. The California legislature passed the Williamson Act in 1965 to preserve agricultural and open space lands by discouraging premature and unnecessary conversion to urban uses. The Act creates an arrangement whereby private landowners’ contract with counties and cities to voluntarily restrict land to agricultural and open-space uses. The vehicle for these agreements is a rolling term 10-year contract (i.e., unless either party files a “notice of nonrenewal,” the contract is automatically renewed annually for an additional year). In return, restricted parcels are assessed for property tax purposes at a rate consistent with their annual use, rather than potential market value. The Hat Ranch project site is not subject to a Williamson Act contract.

Cortese-Knox-Hertzberg Local Government Reorganization Act of 2000 - Prime Agricultural Definition

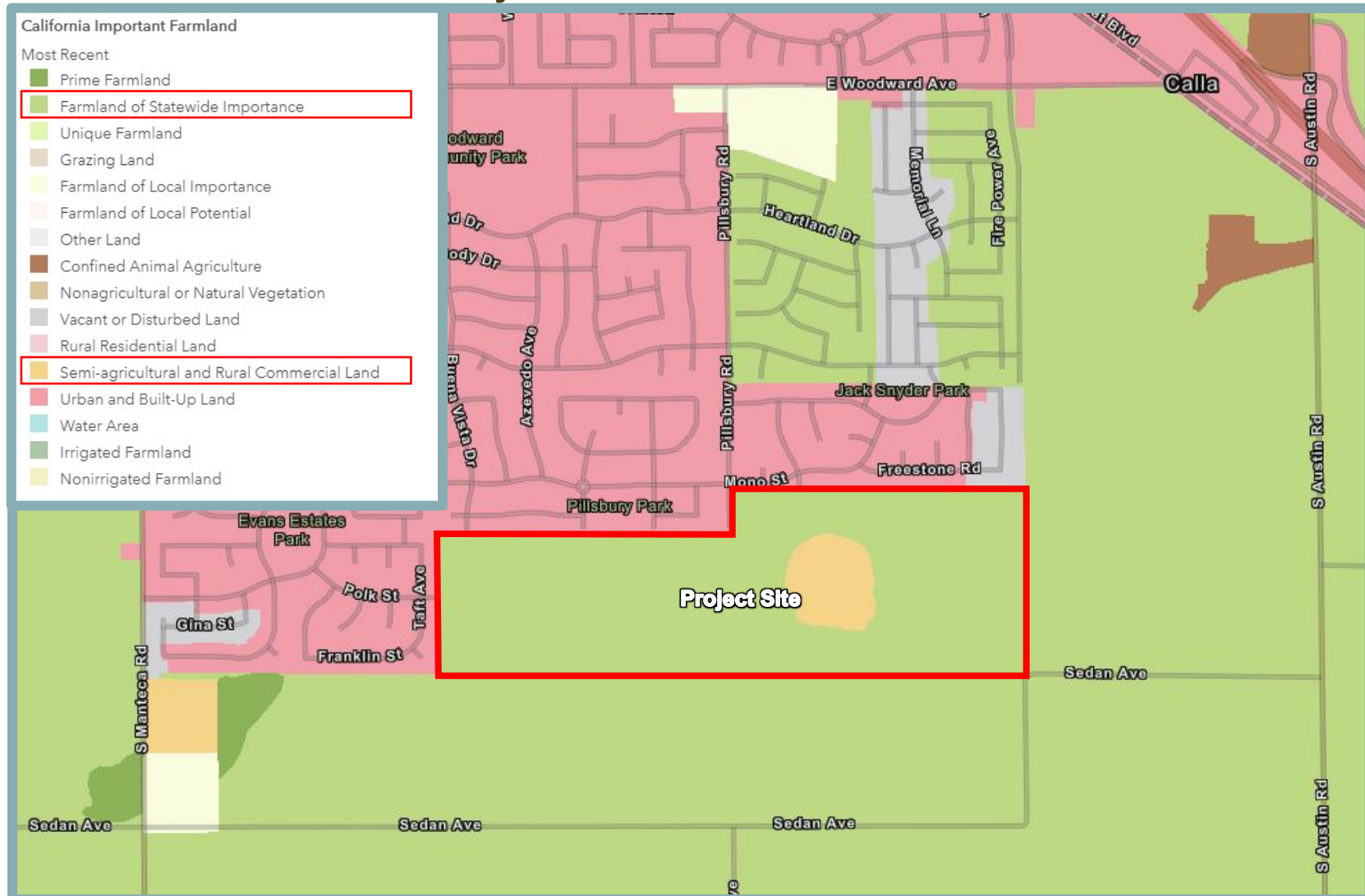
The Cortese-Knox-Hertzberg Local Government Reorganization Act of 2000 (Act) establishes procedures for local government changes of organization, including city incorporations, annexations to a city or special district, and city and special district consolidations. LAFCos have numerous powers under the Act, but those of primary concern are the power to act on local agency boundary changes and to adopt spheres of influence for local agencies.



**Figure 4.2-1
Project Site Soil Map**



**Figure 4.2-2
 Project Site FMMP Classifications**



Public Resources Code Section 21060.1 – Agricultural Land Definition

Pursuant to Public Resources Code (PRC) Section 21060.1, the categories of Prime Farmland, Farmland of Statewide Importance, and Unique Farmland, as defined by the USDA land inventory and monitoring criteria and modified by the State, constitute “agricultural land.”

Local Regulations

The following are the local regulations and standards relevant to agricultural resources.

San Joaquin Local Agency Formation Commission

The following are the applicable General Standards for Annexation and Detachment from San Joaquin LAFCo's *Change of Organization Policies and Procedures (Including Annexations and Reorganizations)* relevant to agricultural resources.

4. Development within Jurisdiction

Development of existing vacant or non-prime agricultural lands for urban uses within the existing jurisdiction or within the sphere of influence should be encouraged before any proposal is approved which would allow for or lead to the development of existing open space lands for non-open space uses which are outside of the existing jurisdiction of the local agency or outside of the existing sphere of influence of the local agency.

San Joaquin County Multi-Species Habitat Conservation and Open Space Plan

The San Joaquin Council of Governments (SJCOG) adopted the San Joaquin County Multi-Species Habitat Conservation and Open Space Plan (SJMSCP) on November 14, 2000. The Plan was prepared with the cooperation of regulatory agencies, cities, and other interested parties with the purpose of balancing the often-conflicting interests of agriculture, development, and the environment. One of the primary goals of the SJMSCP was to obtain permits from State and federal agencies that would cover a variety of project activities over the next 50 years. This goal was partially achieved when the U.S. Fish and Wildlife Service (USFWS) and the California Department of Fish and Wildlife (CDFW) issued incidental take permits in conformance with the federal Endangered Species Act and the California Endangered Species Act.

The project site is covered by the SJMSCP. The City is a signatory to the SJMSCP, and typically requires all areas within the City limits to participate in the SJMSCP. Therefore, upon annexation of the proposed project to the City, the City would also require the project to seek coverage under the SJMSCP. The SJMSCP compensates for Conversions of Open Space for the following activities: urban development, mining, expansion of existing urban boundaries, non-agricultural activities occurring outside of urban boundaries, levee maintenance undertaken by the San Joaquin Area Flood Control Agency, transportation projects, school expansions, non-federal flood control projects, new parks and trails, maintenance of existing facilities for non-federal irrigation district projects, utility installation, maintenance activities, managing Preserves, and similar public agency projects. These activities will be undertaken by both public and private individuals and agencies throughout San Joaquin County and within the County's incorporated cities of Escalon, Lodi, Manteca, Ripon, Stockton, and Tracy. Public agencies including the California Department of Transportation (Caltrans) (for transportation projects), and the SJCOG (for transportation projects) also will undertake activities which will be covered by the SJMSCP. In addition, 5,340 acres is allocated for anticipated projects (e.g., annexations, general plan amendments).



The SJMSCP is administered by a Joint Powers Authority consisting of members of the SJCOG, the CDFW, and the USFWS. Development project applicants are given the option of participating in the SJMSCP as a way to streamline compliance with required local, State and federal laws, including the Conversions of Open Space. Applicants pay mitigation fees on a per-acre basis, as established by the Joint Powers Authority, according to the measures needed to mitigate impacts to the various habitat and biological resources. Different types of land require different levels of mitigation (i.e., one category requires that one acre of a similar land type be preserved for each acre developed, while another type requires that two acres be preserved for each acre developed). The entire County is mapped according to these categories so that landowners, project proponents and project reviewers are easily aware of the applicable SJMSCP fees for the proposed development. The appropriate fees are collected by the City and remitted to SJCOG for administration. SJCOG uses the funds to preserve open space land of comparable types throughout the County, often coordinating with other private or public land trusts to purchase conservation easements or buy land outright for preservation. Development occurring on land that has been classified under the SJMSCP as “no-pay” would not be required to pay a fee. This category usually refers to already urbanized land and infill development areas.

City of Manteca General Plan 2023

The following goals and policies from the City of Manteca General Plan are related to agricultural resources.

General Land Use

Goal LU-6 Provide open space as a framework for the city, and meet the active and passive recreational needs of the community.

Policy LU-P-41 The City shall encourage the continuation of agricultural uses on lands within the Primary and Secondary Urban Services Boundary lines pending their development as urban uses consistent with the General Plan.

Resource Conservation

Goal RC-9 To promote the continuation of agricultural uses in the Manteca area and to discourage the premature conversion of agricultural land to nonagricultural uses, while providing for the urban development needs of Manteca.

Policy RC-P-19 The City shall support the continuation of agricultural uses on lands designated for urban use, until urban development is imminent.

Policy RC-P-20 The City shall provide an orderly and phased development pattern so that farmland is not subjected to premature development pressure.

Policy RC-P-21 In approving urban development near existing agricultural lands, the City shall take actions so that such development will not unnecessarily constrain agricultural practices or adversely affect the viability of nearby agricultural operations.



Policy RC-P-24	Provide buffers at the interface of urban development and farmland in order to minimize conflicts between these uses.
Policy RC-P-25	The City shall ensure, in approving urban development near existing agricultural lands, that such development will not unnecessarily constrain agricultural practices or adversely affect the economic viability of nearby agricultural operations.
Policy RC-P-26	The City shall restrict the fragmentation of agricultural land parcels into small rural residential parcels except in areas designated for estate type development in the General Plan Land Use Diagram.

Agricultural Heritage

Goal CD-11 To the extent possible, new development shall retain or incorporate visual reminders of the agricultural heritage of the community.

Policy CD-P-48	Allow pockets of agricultural activity to remain within the urban areas of the city where such uses are compatible with the surrounding urban use.
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City of Manteca Municipal Code

The following are applicable regulations from the Manteca Municipal Code.

Chapter 13.42 Agricultural Mitigation Fee

The Agricultural Mitigation Fee includes all development impact fees collected to offset the costs associated with the loss of agricultural lands in new development. In order to implement the goals and objectives of the City's General Plan and to mitigate impacts caused by new development within the City, an agricultural mitigation fee is necessary. This includes mitigating the loss of productive agricultural lands converted for urban uses within the City by permanently protecting agricultural lands planned for agricultural use and by working with farmers who voluntarily wish to place conservation easements on their land with fair compensation for such easements. The City Council has found that an Agricultural Mitigation Fee is necessary for the following reasons (see Manteca Municipal Code Section 13.42.020): (1) to benefit the local economy and provide jobs; (2) San Joaquin County farmland is of highly productive quality; (3) the City is surrounded by productive farmland on all sides; (4) the continuation of agricultural operations preserves the existing landscape, environmental and aesthetic resources of the area; (5) the Manteca General Plan sets forth policies to preserve productive farmland, including the development of a program to secure permanent agriculture on lands designated for agriculture in the City and/or County General Plan; (6) California is losing farmland at a rapid rate; (7) loss of agricultural land is consistently determined to be a significant impact under the California Environmental Quality Act (CEQA) in development projects; (8) loss of farmland to development is irreparable and agriculture is an important component of the region's economy and rural community character; and (9) losing agricultural land will have a cumulatively negative impact on air quality, traffic, noise, public services demands, and aesthetics in the City and in the county of San Joaquin. It is the policy of the City to work cooperatively with San Joaquin County and its neighboring cities to preserve agricultural land within or adjacent to the Manteca planning area and its adopted Sphere



of Influence (SOI), beyond that land deemed necessary for development. It is further the policy of the City to protect and conserve agricultural land in its vicinity.

Chapter 8.24 Right to Farm Ordinance

Chapter 8.24 of the Manteca Municipal Code sets forth the City's Right-to-Farm ordinance, which is intended to protect agricultural productivity in the City. The ordinance includes the following statement:

It is the policy of this City to preserve, protect and encourage the use of viable agricultural lands for the production of food and other agricultural products. When nonagricultural land uses extend into or approach agricultural areas, conflicts often arise between such land-uses and agricultural operations. Such conflicts often result in the involuntary curtailment or cessation of agricultural operations, and discourage investment in such operations. This chapter is intended to reduce the occurrence of conflicts between nonagricultural and agricultural land uses within the city.

4.2.4 IMPACTS AND MITIGATION MEASURES

The following section describes the standards of significance and methodology used to analyze and determine the proposed project's potential impacts related to agricultural resources. A discussion of the project's impacts, as well as mitigation measures where necessary, is also presented.

Standards of Significance

An impact is considered significant under Appendix G of the CEQA Guidelines if the proposed project would result in any of the following:

- Result in the conversion of Prime Farmland, Unique Farmland, or Farmland of Statewide Importance to non-agricultural use;
- Conflict with existing zoning for agricultural use, or a Williamson Act contract;
- Conflict with existing zoning for, or cause rezoning of, forest land, timberland, or timberland zoned Timberland Production;
- Result in the loss of forest land or conversion of forest land to non-forest use;
- Involve other changes in the existing environment which, due to their location or nature, could result in conversion of farmland to non-agricultural uses or conversion of forest land to non-forest uses; or
- Conflict with San Joaquin LAFCo policies pertaining to the conversion of agriculture.

It should be noted that potential conflicts with the San Joaquin LAFCo is in accordance with local standards and not Appendix G of the CEQA Guidelines.

The project site is not zoned Timberland Production and does not contain any forest land or large groves of trees. Further, the site is not located near forest land, timberland, or timberland zoned Timberland Production. Therefore, the above thresholds related to forest land are not applicable to the proposed project and are not further addressed in this Draft EIR.

Method of Analysis

Evaluation of potential impacts of the proposed project on agricultural resources is based on information from the following federal, State, and local resources: the Manteca General Plan, the Manteca General Plan EIR, the USDA NRCS Web Soil Survey performed for the project site, the



Soil Survey of San Joaquin County, the Soil Candidate Listing for Prime Farmland and Farmland of Statewide Importance, San Joaquin County, and the Cortese-Knox-Hertzberg Local Government Reorganization Act of 2000. The project's proposed area of disturbance was overlaid with the known on-site agricultural resources to determine the overall impact to agricultural land that would occur during development of the proposed project. The standards of significance listed above are used to delineate the significance of any potential impacts.

As discussed above, pursuant to PRC Section 21060.1, Important Farmland is defined under CEQA as "prime farmland, farmland of statewide importance, or unique farmland, as defined by the United States Department of Agriculture land inventory and monitoring criteria, as modified for California." Therefore, loss or conversion of these lands would be a loss of Important Farmland and result in a significant impact under CEQA. The FMMP was compared with project maps to determine the types of farmland that could be affected by the proposed project. Figure 4.2-2 shows the FMMP land classifications present on-site.

Project-Specific Impacts and Mitigation Measures

The following discussion of agricultural impacts is based on the implementation of the proposed project unless otherwise noted.

4.2-1 Impacts related to the conversion of Prime Farmland, Unique Farmland, or Farmland of Statewide Importance Farmland to non-agricultural use. Based on the analysis below, the proposed project would result in a *significant and unavoidable* impact.

The site consists of three parcels totaling approximately 184.7 acres located in unincorporated San Joaquin County and within the City of Manteca's SOI. Currently, 141.6 acres of the proposed project site is planted with vineyards. The remainder of the project site is developed with a large barn, an office structure, a tree-lined driveway, and a 20,000-square-foot (sf) residence. The project site is currently designated Urban Reserve-Low Density Family Residential (UR-LDR), Park (P), and Commercial Mixed Use (CMU) by the City of Manteca General Plan. The San Joaquin County General Plan designates the site as Agriculture-Urban Reserve (A/UR).

The proposed project would consist of a master planned residential community of up to 738 single-family residences and half-plex units, two neighborhood parks, an elementary/middle school, and associated circulation improvements, including the phased construction of Antone Raymus Parkway, Pillsbury Road, and Atherton Drive.

The Soil Survey of San Joaquin County shows that the project site is made up of Delhi fine sand (DeA and DeB), Delhi loamy sand (DhA), and Tinnin loamy coarse sand. According to the California DOC FMMP, *Soil Candidate Listing for Prime Farmland and Farmland of Statewide Importance, San Joaquin County*, Delhi fine sand (DeA and DeB), Delhi loamy sand (DhA), and Tinnin loamy coarse sand are listed as soils that meet the criteria for Farmland of Statewide Importance. Furthermore, according to the California DOC, 171.6 acres within the project site are designated as Farmland of Statewide Importance (see Figure 4.2-2), 141.6 acres of which are planted with vineyards. Therefore, the proposed project would result in the permanent conversion of Farmland of Statewide Importance to urban uses.



Pursuant to Manteca Municipal Code Chapter 13.42, the proposed project would be subject to the City's Agricultural Mitigation Fee, which would offset the costs associated with the loss of on-site agricultural lands that would be converted to urban uses as part of the proposed project. Revenues generated by payment of the fee could be used by the City to offset the loss of productive agricultural land by permanently protecting agricultural lands elsewhere, or through working with farmers who voluntarily desire to place conservation easements on their land through fair compensation for such easements.

Furthermore, as discussed further under Impact 4.4-6 in the Biological Resources chapter of this EIR, the project site is located within San Joaquin County and would be annexed into the City of Manteca. Both jurisdictions are covered by the SJMSCP. Implementation of the proposed project would result in the conversion of approximately 184.7 acres of existing agricultural land (and an existing residence) into residential housing, a school, and park land. Pursuant to the SJMSCP, conversion of agricultural land would be viewed by SJCOG as a loss of habitat that otherwise provides support to wildlife communities in San Joaquin County. The City, along with the CDFW, the USFWS, and the SJCOG, determined that the loss of general open space lands could be detrimental to special-status species and is detrimental to open spaces that otherwise support common wildlife species. To address potential impacts related to the conversion of agricultural lands that provide habitat for species covered under the SJMSCP, developers can pay applicable fees to the SJMSCP, which are used to preserve and/or create habitat in preserves that would be managed in perpetuity. Because the project would seek coverage under the SJMSCP, the project would be subject to fees to address the conversion of on-site agricultural land to urban uses.

Based on the above, the proposed project would convert Farmland of Statewide Importance to non-agricultural use, and a ***potentially significant*** impact would occur.

Mitigation Measure(s)

Implementation of the following mitigation measure would reduce the above potential impact.

4.2-1 Implement Mitigation Measure 4.4-1.

Impact Significance After Mitigation

Implementation of Mitigation Measure 4.2-1 would ensure that the proposed project complies with all applicable provisions set forth by the SJMSCP, including those regarding the conversion of agricultural land to urban uses. However, while payment of fees to the SJMSCP would preserve and/or create habitat in preserves that would be managed in perpetuity, the impact would not be reduced to a less-than significant level due to the fact that active agricultural land would still be permanently converted to urban uses. Other feasible mitigation does not exist to reduce the above impact to a less-than-significant level. An example of further mitigation would be the salvaging of topsoil. However, salvaging the topsoil is not possible with regard to the project site, as the most valuable topsoil has been removed and used as fill underneath the large residence. Therefore, the impact would remain ***significant and unavoidable***.



4.2-2 Impacts related to conflicts with existing zoning for agricultural uses or Williamson Act contracts. Based on the analysis below, the proposed project would result in a *less-than-significant* impact.

The Hat Ranch project site is currently located within San Joaquin County, though the project site is within the City of Manteca SOI and designated UR-LDR in the Manteca General Plan. Current County zoning for the project site is AG-40, but consistent with the Cortese-Knox-Hertzberg Local Government Reorganization Act, the proposed project includes Rezoning the site to the City's Planned Development Single-Family Residential (PD-R-1), Public/Quasi-Public (PQP), and PD-Park (PD-P) zoning districts. The conversion of the project area to residential land uses would be consistent with the urban land use designations in the Manteca General Plan for the project site. Therefore, the proposed project would result in a ***less-than-significant*** impact in regard to conflicts with existing agricultural zoning. In addition, the project site is not subject to any Williamson Act Contracts. Therefore, the project would not be in conflict with any such contract(s), and would have no impact on such contract.

Mitigation Measure(s)

None required.

4.2-3 Impacts related to compliance with the policies of San Joaquin LAFCo pertaining to the conversion of agricultural land. Based on the analysis below, the proposed project would result in a *significant and unavoidable* impact.

The proposed project site is currently located within San Joaquin County and has a San Joaquin County General Plan land use designation of A/UR, and a County zoning designation of AG-40. The proposed project would include a request for annexation of the 184.7-acre project site to the City of Manteca, which ultimately requires the approval of San Joaquin LAFCo.

As previously mentioned, the project site is designated as Farmland of Statewide Importance. Table 4.2-4 compares the characteristics of the proposed Hat Ranch project to the five qualifications outlined by LAFCo. Table 4.2-4 shows that the proposed project site meets criteria (d) and criteria (e). Therefore, the proposed project site is defined as prime agricultural farmland under Section 56064 of the Cortese-Knox-Hertzberg Act. As previously mentioned, the project applicant is subject to the City's Agricultural Mitigation Fee, pursuant to Manteca Municipal Code Chapter 13.42, and through Mitigation Measure 4.4-1, would also be subject to applicable fees set forth by the SJMSCP related to the conversion of on-site agricultural land. Therefore, the project would result in a ***significant*** impact with regards to compliance with LAFCo's policies related to the conversion of agricultural land to urban uses.



<p>Table 4.2-4 LAFCo "Prime Agricultural Land" Comparison</p>	
Criteria	Discussion
(a) Land that qualifies for rating as Class I or Class II in the Soil Conservation Service land use capability classification.	All of the on-site soils are in Class III. Class III soils have severe limitations that restrict the choice of plants or that require special or very careful conservation practices. As such, the soils within the Hat Ranch project site do not meet criteria (a).
(b) Land that qualifies for rating 80 through 100 Storie Index Rating.	The on-site soils have a Storie Index Rating of Grade 2 to 3 (16 to 68). Therefore, the land does not meet criteria (b).
(c) Land that supports livestock used for the production of food and fiber and that has an annual carrying capacity equivalent to at least one animal unit per acre as defined by the United States Department of Agriculture in the National Handbook on Range and Related Grazing Lands, July 1967, developed pursuant to Public Law 46, December 1935.	<p>The Hat Ranch project site has never been used as land that supports livestock for the production of food and fiber.</p> <p>Livestock is not supported for commercial purposes within the project site. As such, the land within the Hat Ranch project site does not meet criteria (c).</p>
(d) Land planted with fruit or nut-bearing trees, vines, bushes, or crops that have a nonbearing period of less than five years and that will return during the commercial bearing period on an annual bases from the production of unprocessed agricultural plant production not less than four hundred dollars (\$400) per acre.	<p>Fruit or nut-bearing trees, vines, bushes, or crops are growing within the Hat Ranch project. There is currently a vineyard located within the proposed project site. As such, the land within the Hat Ranch project site does meet criteria (d).</p> <p>The existing on-site vineyard produces more than \$400 per gross acre. The proposed project would include development on the existing vineyard. Therefore, the project would conflict with LAFCo policies related to the preservation of agricultural resources.</p> <p>Given the above, the currently proposed area of development (i.e., the Hat Ranch project site) does meet criteria (d).</p>
(e) Land that has returned from the production of unprocessed agricultural plant products an annual gross value of not less than four hundred dollars (\$400) per acre for three of the previous five calendar years.	<p>The existing on-site vineyard produces more than \$400 annual gross value per acre of unprocessed agricultural crop. Therefore, the project would conflict with LAFCo policies related to the preservation of agricultural resources.</p> <p>Given the above, the currently proposed area of development (i.e., the Hat Ranch project site) does meet criteria (e).</p>
<p>Source: Assembly Committee on Local Government. Guide to the Cortese-Knox-Hertzberg Local Government Reorganization Act of 2000 [pg. 11]. November 2020.</p>	



Mitigation Measure(s)

Implementation of the following mitigation measure would reduce the above potential impact.

4.2-3 *Implement Mitigation Measure 4.4-1.*

Impact Significance After Mitigation

Implementation of Mitigation Measure 4.2-3 would ensure that the proposed project complies with all applicable provisions set forth by the SJMSCP, including those regarding the conversion of agricultural land to urban uses. However, while payment of fees to the SJMSCP would preserve and/or create habitat in preserves that would be managed in perpetuity, the impact would not be reduced to a less-than significant level because active agricultural land would still be permanently converted to urban uses. Other feasible mitigation does not exist. Therefore, the impact would remain *significant and unavoidable*.

Cumulative Impacts and Mitigation Measures

The following discussion of impacts is based on the implementation of the proposed project in combination with other proposed and pending projects in the region.

4.2-4 Impacts related to cumulative loss of agricultural land. Based on the analysis below, the proposed project would result in a *less than cumulatively considerable* impact.

As discussed above, pursuant to PRC Section 21060.1, Important Farmland is defined under CEQA as “prime farmland, farmland of statewide importance, or unique farmland, as defined by the USDA land inventory and monitoring criteria, as modified for California.” Therefore, loss or conversion of these lands would be a loss of Important Farmland and result in a significant impact under CEQA. Pursuant to Table 4.B-4 of the San Joaquin County 2035 General Plan EIR, the County consists of 385,337 acres of Prime Farmland; 83,307 acres of Farmland of Statewide Importance; and 69,481 acres of Unique Farmland; 76,869 acres of Farmland of Local Importance; and 139,235 acres of Grazing Land. According to the Manteca General Plan EIR, the cumulative effect of incremental conversion of farmland is a continuing loss of farm operations due to the encroachment of urban uses that conflict with farm activities. The Manteca General Plan EIR determined that even with implementation of mitigation measures, goals, and policies, impacts related to the conversion of agricultural resources would remain significant and unavoidable, for which a Statement of Overriding Considerations was adopted.

The Manteca General Plan designates the project site for urban reserve low density residential development, indicating that the conversion of this particular agricultural land was anticipated in the Manteca General Plan EIR. In addition, as discussed under Impact 4.2-1, to address the conversion of on-site agricultural land to urban uses, the project applicant would be subject to applicable fees set forth by the City’s Municipal Code and the SJMSCP. Such fees would include the City’s Agricultural Mitigation Fee, which would offset the loss of on-site agricultural lands by permanently protecting agricultural lands elsewhere, as well as fees payable to the SJMSCP that would be used to preserve and/or create habitat in preserves that would be managed in



perpetuity. Similar development projects within the SJMSCP boundaries that result in conversion of farmland would also be required to pay applicable fees to the SJMSCP. Furthermore, as discussed under Impact 4.2-2, the project site is not subject to any Williamson Act contracts.

CEQA Guidelines Section 15064, Subdivision (h)(5) states, “[...]the mere existence of significant cumulative impacts caused by other projects alone shall not constitute substantial evidence that the proposed project’s incremental effects are cumulatively considerable.” Therefore, even where cumulative impacts are significant, any level of incremental contribution is not necessarily deemed cumulatively considerable. Although the continued loss of agricultural land in the County due to encroaching urban uses would result in a significant cumulative impact, the proposed project would not result in development of urban uses that was not previously anticipated in the Manteca General Plan and would be subject to applicable fees to ensure that the loss of on-site agricultural lands is offset elsewhere.

Based on the above, while the continued loss of agricultural land in the County due to encroaching urban uses would result in a significant cumulative impact, the proposed project would result in an incremental contribution to the cumulative impact. Therefore, the proposed project’s incremental contribution to the environmental effect of buildout of the Manteca General Plan would be ***less than cumulatively considerable***.

Mitigation Measure(s)

None required.



4.3 AIR QUALITY, GREENHOUSE GAS EMISSIONS, AND ENERGY

4.3 AIR QUALITY, GREENHOUSE GAS EMISSIONS, AND ENERGY

4.3.1 INTRODUCTION

The Air Quality, Greenhouse Gas Emissions, and Energy chapter of the EIR describes the potential impacts of the proposed project on local and regional air quality emissions, potential impacts related to greenhouse gas emissions (GHGs) and climate change, and potential impacts related to energy. The chapter includes a discussion of the existing air quality, GHG, and energy setting, construction-related air quality impacts resulting from grading and equipment emissions, direct and indirect emissions associated with operation of the project, the impacts of these emissions on both the local and regional scale, impacts associated with energy use, and mitigation measures warranted to reduce or eliminate any identified significant impacts. The chapter relies on information obtained from the *City of Manteca General Plan*¹ and associated EIR,² the City of Manteca Climate Action Plan,³ the California Emissions Estimator Model (CalEEMod) version 2020.4.0,⁴ and is primarily based on information, guidance, and analysis protocol provided by the San Joaquin Valley Air Pollution Control District (SJVAPCD).

In response to the Notice of Preparation (NOP), the City received comments related to air quality, GHG emissions, and energy regarding the potential for the proposed project to result in air quality impacts related to increased dust, dirt, and traffic emissions, as well as if the proposed residences would include solar panels. The comments have been carefully reviewed and considered by the City of Manteca and are reflected in the analysis of impacts in this chapter.

4.3.2 EXISTING ENVIRONMENTAL SETTING

The following information provides an overview of the existing environmental setting in relation to air quality within the proposed project area. Air basin characteristics, ambient air quality standards (AAQS), attainment status and regional air quality plans, local air quality monitoring, odors, and sensitive receptors are discussed. In addition to the information pertaining to air quality, information related to climate change, GHGs, and energy is provided as well.

Air Basin Characteristics

The City of Manteca is located within the northern portion of the San Joaquin Valley Air Basin (SJVAB), which consists of eight counties and represents approximately 16 percent of the State's geographic area. The topography and meteorology within the SJVAB, including low precipitation levels, cloudless days, high temperatures, and light winds during the summer and inversion layers in the atmosphere during the winter, provide ideal conditions for trapping air pollution for long periods of time and producing harmful levels of air pollutants, including ozone (O₃) and particulate matter. In addition, the region houses the State's major arteries for goods and people movement, Interstate 5 (I-5) to the west and State Route 99 (SR 99) through the central valley, thereby attracting a large volume of vehicular traffic.

¹ City of Manteca. *Manteca General Plan 2023 Policy Document*. October 6, 2003.

² City of Manteca. *Manteca General Plan 2023 Environmental Impact Report*. October 6, 2003.

³ City of Manteca. *Climate Action Plan*. October 15, 2013.

⁴ California Air Pollution Control Officers Association. *California Emissions Estimator Model User's Guide Version 2020.4.0*. May 2021.



The geography of mountainous areas to the east, west, and south, in combination with long summers and relatively short winters, contributes to local climate episodes that prevent the dispersion of pollutants. Wind speed and direction play an important role in dispersion and transport of air pollutants. Wind at the surface and aloft can disperse pollution by mixing and by transporting the pollution to other locations. Especially in summer, winds in the SJVAB most frequently blow from the northwesterly direction. As a result of the prevailing wind direction, pollutants from the Bay Area and the Sacramento Valley are transported into the SJVAB.⁵ The SJVAB's topographic features restrict air movement and channel the air mass towards the southeastern end of the valley.

Solar radiation and temperature are particularly important in the chemistry of ozone formation. Generally, the higher the temperature, the more ozone formed, because reaction rates increase with temperature. The SJVAB averages over 260 sunny days per year. Ozone levels are low during winter periods when there is much less sunlight to drive the photochemical reaction. In addition, precipitation, clouds, and fog can block the solar radiation required for ozone formation. Wet fogs can cleanse the air during winter as moisture collects on particles and deposits them on the ground. The winds and unstable air conditions experienced during the passage of winter storms result in periods of low pollutant concentrations and excellent visibility. Between winter storms, high pressure and light winds allow cold moist air to pool on the SJVAB floor, thus creating strong low-level temperature inversions and very stable air conditions. However, atmospheric moisture can also increase pollution levels. In fogs with less water content, the moisture acts to form secondary ammonium nitrate particulate matter, which is part of the SJVAB's particulate matter (PM) problem. Accordingly, wintertime conditions favorable to fog formation are also conditions favorable to high concentrations of respirable or suspended particulate matter (i.e., particles less than 10 microns in diameter or PM₁₀) and fine particles (i.e., particles less than 2.5 microns in diameter or PM_{2.5}).

Ambient Air Quality Standards

Both the U.S. Environmental Protection Agency (USEPA) and the California Air Resources Board (CARB) have established AAQS for common pollutants. The federal standards are divided into primary standards, which are designed to protect the public health, and secondary standards, which are designed to protect the public welfare. The AAQS for each contaminant represent safe levels that avoid specific adverse health effects. Pollutants for which air quality standards have been established are called "criteria" pollutants. Table 4.3-1 identifies the major pollutants, characteristics, health effects and typical sources. The national and California AAQS (NAAQS and CAAQS, respectively) are summarized in Table 4.3-2. The NAAQS and CAAQS were developed independently with differing purposes and methods. As a result, the federal and State standards differ in some cases. In general, the State of California standards are more stringent than the federal standards, particularly for ozone and PM.

A description of each criteria pollutant and its potential health effects is provided in the following section.

⁵ San Joaquin Valley Air Pollution Control District. *Frequently Asked Questions*. Available at: <https://ww2.valleyair.org/about/frequently-asked-questions/>. Accessed April 2022.



**Table 4.3-1
Summary of Criteria Pollutants**

Pollutant	Characteristics	Health Effects	Major Sources
Ozone	A highly reactive gas produced by the photochemical process involving a chemical reaction between the sun's energy and other pollutant emissions. Often called photochemical smog.	<ul style="list-style-type: none"> • Eye irritation • Wheezing, chest pain, dry throat, headache, or nausea • Aggravated respiratory disease such as emphysema, bronchitis, and asthma 	Combustion sources such as factories, automobiles, and evaporation of solvents and fuels.
Carbon Monoxide	An odorless, colorless, highly toxic gas that is formed by the incomplete combustion of fuels.	<ul style="list-style-type: none"> • Impairment of oxygen transport in the bloodstream • Impaired vision, reduced alertness, chest pain, and headaches • Can be fatal in the case of very high concentrations 	Automobile exhaust, combustion of fuels, and combustion of wood in woodstoves and fireplaces.
Nitrogen Dioxide	A reddish-brown gas that discolors the air and is formed during combustion of fossil fuels under high temperature and pressure.	<ul style="list-style-type: none"> • Lung irritation and damage • Increased risk of acute and chronic respiratory disease 	Automobile and diesel truck exhaust, industrial processes, and fossil-fueled power plants.
Sulfur Dioxide	A colorless, irritating gas with a rotten egg odor formed by combustion of sulfur-containing fossil fuels.	<ul style="list-style-type: none"> • Aggravation of chronic obstruction lung disease • Increased risk of acute and chronic respiratory disease 	Diesel vehicle exhaust, oil-powered power plants, and industrial processes.
Particulate Matter (PM ₁₀ and PM _{2.5})	A complex mixture of extremely small particles and liquid droplets that can easily pass through the throat and nose and enter the lungs.	<ul style="list-style-type: none"> • Aggravation of chronic respiratory disease • Heart and lung disease • Coughing • Bronchitis • Chronic respiratory disease in children • Irregular heartbeat • Nonfatal heart attacks 	Combustion sources such as automobiles, power generation, industrial processes, and wood burning. Also from unpaved roads, farming activities, and fugitive windblown dust.
Lead	A metal found naturally in the environment as well as in manufactured products.	<ul style="list-style-type: none"> • Loss of appetite, weakness, apathy, and miscarriage • Lesions of the neuromuscular system, circulatory system, brain, and gastrointestinal tract 	Industrial sources and combustion of leaded aviation gasoline.

Sources:

- **California Air Resources Board. California Ambient Air Quality Standards (CAAQS). Available at:** <https://ww2.arb.ca.gov/resources/3alifornia-ambient-air-quality-standards>. Accessed March 2022.
- **Sacramento Metropolitan, El Dorado, Feather River, Placer, and Yolo-Solano Air Districts, Spare the Air website. Air Quality Information for the Sacramento Region. Available at:** sparetheair.com. Accessed March 2022.
- **California Air Resources Board. Glossary of Air Pollution Terms. Available at:** <https://ww2.arb.ca.gov/glossary>. Accessed March 2022.



**Table 4.3-2
Ambient Air Quality Standards**

Pollutant	Averaging Time	CAAQS	NAAQS	
			Primary	Secondary
Ozone	1 Hour	0.09 ppm	-	Same as primary
	8 Hour	0.070 ppm	0.070 ppm	
Carbon Monoxide	8 Hour	9 ppm	9 ppm	-
	1 Hour	20 ppm	35 ppm	
Nitrogen Dioxide	Annual Mean	0.030 ppm	53 ppb	Same as primary
	1 Hour	0.18 ppm	100 ppb	-
Sulfur Dioxide	24 Hour	0.04 ppm	-	-
	3 Hour	-	-	0.5 ppm
	1 Hour	0.25 ppm	75 ppb	-
Respirable Particulate Matter (PM ₁₀)	Annual Mean	20 ug/m ³	-	Same as primary
	24 Hour	50 ug/m ³	150 ug/m ³	
Fine Particulate Matter (PM _{2.5})	Annual Mean	12 ug/m ³	12 ug/m ³	15 ug/m ³
	24 Hour	-	35 ug/m ³	Same as primary
Lead	30 Day Average	1.5 ug/m ³	-	-
	Calendar Quarter	-	1.5 ug/m ³	Same as primary
Sulfates	24 Hour	25 ug/m ³	-	-
Hydrogen Sulfide	1 Hour	0.03 ppm	-	-
Vinyl Chloride	24 Hour	0.010 ppm	-	-
Visibility Reducing Particles ¹	8 Hour	see note below	-	-

ppm = parts per million

ppb = parts per billion

ug/m³ = micrograms per cubic meter

Note: Statewide Visibility Reducing Particle Standard (except Lake Tahoe Air Basin): Particles in sufficient amount to produce an extinction coefficient of 0.23 per kilometer when the relative humidity is less than 70 percent. This standard is intended to limit the frequency and severity of visibility impairment due to regional haze and is equivalent to a 10-mile nominal visual range.

Source: California Air Resources Board. Ambient Air Quality Standards. May 4, 2016. Available at: <https://ww2.arb.ca.gov/sites/default/files/2020-07/aaqs2.pdf>. Accessed March 2022.

Ozone

Ozone is a reactive gas consisting of three oxygen atoms. In the troposphere, ozone is a product of the photochemical process involving the sun's energy, and is a secondary pollutant formed as a result of a complex chemical reaction between reactive organic gases (ROG) and oxides of nitrogen (NO_x) emissions in the presence of sunlight. As such, unlike other pollutants, ozone is not released directly into the atmosphere from any sources. In the stratosphere, ozone exists naturally and shields the Earth from harmful incoming ultraviolet radiation. The primary source of ozone precursors is mobile sources, including cars, trucks, buses, construction equipment, and agricultural equipment.

Ground-level ozone reaches the highest level during the afternoon and early evening hours. High levels occur most often during the summer months. Ground-level ozone is a strong irritant that could cause constriction of the airways, forcing the respiratory system to work harder in order to provide oxygen. Ozone at the Earth's surface causes numerous adverse health effects and is a



major component of smog. High concentrations of ground level ozone can adversely affect the human respiratory system and aggravate cardiovascular disease and many respiratory ailments.

Reactive Organic Gas

ROG refers to several reactive chemical gases composed of hydrocarbon compounds typically found in paints and solvents that contributes to the formation of smog and ozone by involvement in atmospheric chemical reactions. A separate health standard does not exist for ROG. However, some compounds that make up ROG are toxic, such as the carcinogen benzene.

Oxides of Nitrogen

NO_x are a family of gaseous nitrogen compounds and are precursors to the formation of ozone and particulate matter. The major component of NO_x, nitrogen dioxide (NO₂), is a reddish-brown gas that discolors the air and is toxic at high concentrations. NO_x results primarily from the combustion of fossil fuels under high temperature and pressure. On-road and off-road motor vehicles and fuel combustion are the major sources of NO_x. NO_x reacts with ROG to form smog, which could result in adverse impacts to human health, damage the environment, and cause poor visibility. Additionally, NO_x emissions are a major component of acid rain. Health effects related to NO_x include lung irritation and lung damage and can cause increased risk of acute and chronic respiratory disease.

Carbon Monoxide

Carbon monoxide (CO) is a colorless, odorless, poisonous gas produced by incomplete burning of carbon-based fuels such as gasoline, oil, and wood. When CO enters the body, the CO combines with chemicals in the body, which prevents blood from carrying oxygen to cells, tissues, and organs. Symptoms of exposure to CO can include problems with vision, reduced alertness, and general reduction in mental and physical functions. Exposure to CO can result in chest pain, headaches, reduced mental alertness, and death at high concentrations.

Sulfur Dioxide

Sulfur Dioxide (SO₂) is a colorless, irritating gas with a rotten egg odor formed primarily by the combustion of sulfur-containing fossil fuels from mobile sources, such as locomotives, ships, and off-road diesel equipment. SO₂ is also emitted from several industrial processes, such as petroleum refining and metal processing. Similar to airborne NO_x, suspended sulfur oxide particles contribute to poor visibility. The sulfur oxide particles are also a component of particulate matter, discussed below.

Particulate Matter

Particulate matter, also known as particle pollution or PM, is a complex mixture of extremely small particles and liquid droplets. Particle pollution is made up of a number of components, including acids (such as nitrates and sulfates), organic chemicals, metals, and soil or dust particles. The size of particles is directly linked to their potential for causing health impacts. The USEPA is concerned about particles that are 10 micrometers in diameter or smaller (PM₁₀) because those are the particles that generally pass through the throat and nose and enter the lungs. Once inhaled, the particles could affect the heart and lungs and cause serious health effects. USEPA groups particle pollution into three categories based on their size and where they are deposited:



- “Inhalable coarse particles (PM_{2.5-10}),” which are found near roadways and dusty industries, are between 2.5 and 10 micrometers in diameter. PM_{2.5-10} is deposited in the thoracic region of the lungs.
- “Fine particles (PM_{2.5}),” which are found in smoke and haze, are 2.5 micrometers in diameter and smaller. PM_{2.5} particles could be directly emitted from sources such as forest fires, or could form when gases emitted from power plants, industries, and automobiles react in the air. They penetrate deeply into the thoracic and alveolar regions of the lungs.
- “Ultrafine particles (UFP),” are very, very small particles (less than 0.1 micrometers in diameter) largely resulting from the combustion of fossil fuels, meat, wood, and other hydrocarbons. While UFP mass is a small portion of PM_{2.5}, their high surface area, deep lung penetration, and transfer into the bloodstream could result in disproportionate health impacts relative to their mass. UFP is not currently regulated separately, but is analyzed as part of PM_{2.5}.

PM₁₀, PM_{2.5}, and UFP include primary pollutants, which are emitted directly to the atmosphere and secondary pollutants, which are formed in the atmosphere by chemical reactions among precursors. Generally speaking, PM_{2.5} and UFP are emitted by combustion sources like vehicles, power generation, industrial processes, and wood burning, while PM₁₀ sources include the same sources plus roads and farming activities. Fugitive windblown dust and other area sources also represent a source of airborne dust. Long-term PM pollution, especially fine particles, could result in significant health problems including, but not limited to, the following: increased respiratory symptoms, such as irritation of the airways, coughing or difficulty breathing; decreased lung function; aggravated asthma; development of chronic respiratory disease in children; development of chronic bronchitis or obstructive lung disease; irregular heartbeat; heart attacks; and increased blood pressure.

Lead

Lead is a relatively soft and chemically resistant metal that is a natural constituent of air, water, and the biosphere. Lead forms compounds with both organic and inorganic substances. As an air pollutant, lead is present in small particles. Sources of lead emissions in California include a variety of industrial activities. Gasoline-powered automobile engines were a major source of airborne lead through the use of leaded fuels. The use of leaded fuel has been mostly phased out, with the result that ambient concentrations of lead have dropped dramatically. However, because lead was emitted in large amounts from vehicles when leaded gasoline was used, lead is present in many soils (especially urban soils) as a result of airborne dispersion and could become re-suspended into the air.

Because lead is slowly excreted by the human body, exposures to small amounts of lead from a variety of sources could accumulate to harmful levels. Effects from inhalation of lead above the level of the AAQS may include impaired blood formation and nerve conduction. Lead can adversely affect the nervous, reproductive, digestive, immune, and blood-forming systems. Symptoms could include fatigue, anxiety, short-term memory loss, depression, weakness in the extremities, and learning disabilities in children. Lead also causes cancer.

Sulfates

Sulfates are the fully oxidized ionic form of sulfur and are colorless gases. Sulfates occur in combination with metal and/or hydrogen ions. In California, emissions of sulfur compounds occur primarily from the combustion of petroleum-derived fuels (e.g., gasoline and diesel fuel) that contain sulfur. The sulfur is oxidized to SO₂ during the combustion process and subsequently



converted to sulfate compounds in the atmosphere. The conversion of SO₂ to sulfates takes place comparatively rapidly and completely in urban areas of California due to regional meteorological features.

The sulfates standard established by CARB is designed to prevent aggravation of respiratory symptoms. Effects of sulfate exposure at levels above the standard include a decrease in ventilatory function, aggravation of asthmatic symptoms, and an increased risk of cardio-pulmonary disease. Sulfates are particularly effective in degrading visibility, and, because they are usually acidic, can harm ecosystems and damage materials and property.

Hydrogen Sulfide

Hydrogen sulfide (H₂S) is associated with geothermal activity, oil and gas production, refining, sewage treatment plants, and confined animal feeding operations. Hydrogen sulfide is extremely hazardous in high concentrations, especially in enclosed spaces (800 parts per million [ppm] can cause death).

Vinyl Chloride

Vinyl chloride (C₂H₃Cl, also known as VCM) is a colorless gas that does not occur naturally, but is formed when other substances such as trichloroethane, trichloroethylene, and tetrachloroethylene are broken down. Vinyl chloride is used to make polyvinyl chloride (PVC) which is used to make a variety of plastic products, including pipes, wire and cable coatings, and packaging materials.

Visibility Reducing Particles

Visibility reducing particles are a mixture of suspended particulate matter consisting of dry solid fragments, solid cores with liquid coatings, and small droplets of liquid. The standard is intended to limit the frequency and severity of visibility impairment due to regional haze and is equivalent to a 10-mile nominal visual range.

Toxic Air Contaminants

In addition to the criteria pollutants discussed above, toxic air contaminants (TACs) are also a category of environmental concern. TACs are present in many types of emissions with varying degrees of toxicity. Public exposure to TACs can result from emissions from normal operations, as well as accidental releases. Common stationary sources of TACs include gasoline stations, dry cleaners, and diesel backup generators. The other, often more significant, common source type is on-road motor vehicles, such as cars and trucks, on freeways and roads, and off-road sources such as construction equipment, ships, and trains.

Fossil fueled combustion engines, including those used in cars, trucks, and some pieces of construction equipment, release at least 40 different TACs. In terms of health risks, the most volatile contaminants are diesel particulate matter (DPM), benzene, formaldehyde, 1,3-butadiene, toluene, xylenes, and acetaldehyde. Gasoline vapors contain several TACs, including benzene, toluene, and xylenes. Diesel engines emit a complex mixture of air pollutants, including both gaseous and solid material. The solid material in diesel exhaust, DPM, is composed of carbon particles and numerous organic compounds, including over 40 known cancer-causing organic substances. Examples of such chemicals include polycyclic aromatic hydrocarbons, benzene, formaldehyde, acetaldehyde, acrolein, and 1,3-butadiene. Diesel exhaust also contains gaseous pollutants, including volatile organic compounds and NO_x. Due to the published evidence of a relationship between diesel exhaust exposure and lung cancer and other adverse health effects,



the CARB has identified DPM from diesel-fueled engines as a TAC. Although a variety of TACs are emitted by fossil fueled combustion engines, the cancer risk due to DPM exposure represents a more significant risk than the other TACs discussed above.⁶

More than 90 percent of DPM is less than one micrometer in diameter, and, thus, DPM is a subset of PM_{2.5}. As a California statewide average, DPM comprises about eight percent of PM_{2.5} in outdoor air, although DPM levels vary regionally due to the non-uniform distribution of sources throughout the State. Most major sources of diesel emissions, such as ships, trains, and trucks, operate in and around ports, rail yards, and heavily traveled roadways. Such areas are often located near highly populated areas. Accordingly, elevated DPM levels are mainly an urban problem, with large numbers of people exposed to higher DPM concentrations, resulting in greater health consequences compared to rural areas.

Due to the high levels of diesel activity, high volume freeways, stationary diesel engines, rail yards and facilities attracting heavy and constant diesel vehicle traffic are identified as having the highest associated health risks from DPM. Construction-related activities also have the potential to generate concentrations of DPM from on-road haul trucks and off-road equipment exhaust emissions.

Health risks from TACs are a function of both the concentration of emissions and the duration of exposure, which typically are associated with long-term exposure and the associated risk of contracting cancer. Health effects of exposure to TACs other than cancer include birth defects, neurological damage, and death. Because chronic exposure can result in adverse health effects, TACs are regulated at the regional, State, and federal level. The identification, regulation, and monitoring of TACs is relatively new compared to criteria air pollutants that have established AAQS. TACs are regulated or evaluated on the basis of risk to human health rather than comparison to an AAQS or emission-based threshold.

Attainment Status and Regional Air Quality Plans

The Federal Clean Air Act (FCAA) and the California Clean Air Act (CCAA) require all areas of California to be classified as attainment, nonattainment, or unclassified as to their status with regard to the NAAQS and/or CAAQS. The FCAA and CCAA require that the CARB, based on air quality monitoring data, designate portions of the State where the federal or State AAQS are not met as “nonattainment areas.” Because of the differences between the national and State standards, the designation of nonattainment areas is different under the federal and State legislation. The CCAA requires local air pollution control districts to prepare air quality attainment plans. These plans must provide for district-wide emission reductions of five percent per year averaged over consecutive three-year periods or, provide for adoption of “all feasible measures on an expeditious schedule.”

Table 4.3-3 presents the current attainment status of the jurisdictional area of the SJVAPCD. As shown in the table, at the federal level, the area is designated as extreme nonattainment for the 8-hour ozone standard, nonattainment for PM_{2.5}, and attainment or unclassified for all other criteria pollutants. At the State level, the area is designated as severe nonattainment for the one-hour ozone standard, and nonattainment for the 8-hour ozone, PM₁₀, and PM_{2.5} standards. The area is designated attainment or unclassified for all other State standards.

⁶ California Air Resources Board. *Reducing Toxic Air Pollutants in California's Communities*. February 6, 2002.



Local Air Quality Monitoring

The SJVAPCD, CARB, U.S. National Park Service, and the Santa Rosa Rancheria in Lemoore operate an extensive air monitoring network to measure progress toward attainment of the NAAQS. Some monitors are operated specifically for use in determining attainment status, while others are operated for other purposes such as generating daily air quality forecasts. The SJVAPCD uses ozone and PM data from over 60 monitors operated at 29 sites within the SJVAB. The closest monitoring stations to the project site are the Manteca-530 Fishback Rd station, located approximately 3.4 miles northwest of the project site, and the Stockton-Hazelton Street station, located approximately 13 miles north of the project site. Although the Manteca-530 Fishback Rd station is closest to the site, the data provided by the station is limited and does not include all of the pollutants for which the area is under nonattainment. Therefore, data from the Stockton-Hazelton Street station is provided in Table 4.3-4 for the years 2018 through 2020.

Table 4.3-3 San Joaquin Valley Attainment Status Designations		
Pollutant	Federal Standards	State Standards
Ozone - One hour	No Federal Standard ^f	Nonattainment/Severe
Ozone - Eight hour	Nonattainment/Extreme ^e	Nonattainment
PM ₁₀	Attainment ^c	Nonattainment
PM _{2.5}	Nonattainment ^d	Nonattainment
Carbon Monoxide	Attainment/Unclassified	Attainment/Unclassified
Nitrogen Dioxide	Attainment/Unclassified	Attainment
Sulfur Dioxide	Attainment/Unclassified	Attainment
Lead (Particulate)	No Designation/Classification	Attainment
Hydrogen Sulfide	No Federal Standard	Unclassified
Sulfates	No Federal Standard	Attainment
Visibility Reducing Particles	No Federal Standard	Unclassified
Vinyl Chloride	No Federal Standard	Attainment
Notes: ^a See 40 CFR Part 81 ^b See California Code of Regulations (CCR) Title 17 Sections 60200-60210 ^c On September 25, 2008, EPA redesignated the San Joaquin Valley to attainment for the PM ₁₀ National Ambient Air Quality Standard (NAAQS) and approved the PM ₁₀ Maintenance Plan. ^d The Valley is designated nonattainment for the 1997 PM _{2.5} NAAQS. EPA designated the Valley as nonattainment for the 2006 PM _{2.5} NAAQS on November 13, 2009 (effective December 14, 2009). ^e Though the Valley was initially classified as serious nonattainment for the 1997 8-hour ozone standard, EPA approved Valley reclassification to extreme nonattainment in the Federal Register on May 5, 2010 (effective June 4, 2010). ^f Effective June 15, 2005, the U.S. Environmental Protection Agency (EPA) revoked the federal 1-hour ozone standard, including associated designations and classifications. EPA had previously classified the SJVAB as extreme nonattainment for this standard. EPA approved the 2004 Extreme Ozone Attainment Demonstration Plan on March 8, 2010 (effective April 7, 2010). Many applicable requirements for extreme 1-hour ozone nonattainment areas continue to apply to the SJVAB.		
Source: San Joaquin Valley Air Pollution Control District. Ambient Air Quality Standards & Attainment Status. Available at: https://www.valleyair.org/aqinfo/attainment.htm. Accessed March 2022.		



Table 4.3-4 Air Quality Monitoring Data Summary for the Stockton-Hazelton Street Station (2018-2020)				
Pollutant	Standard	Days Standard Was Exceeded		
		2018	2019	2020
1-Hour Ozone	State	0	1	1
	Federal	0	0	0
8-Hour Ozone	State	2	2	2
	Federal	1	2	2
24-Hour PM ₁₀	State	31.7	45.4	74.0*
	Federal	13.1	0	8.0*
24-Hour PM _{2.5}	Federal	25.0	6.4	23.2
Note: * indicates that insufficient data was available from the Stockton-Hazelton Street Station and, thus, values from the Manteca-530 Fishback Rd station were used.				
Source: California Air Resources Board, Aerometric Data Analysis and Management (iADAM) System, http://www.arb.ca.gov/adam/topfour/topfour1.php . Accessed March 2022.				

Odors

While offensive odors rarely cause physical harm, they can be unpleasant, leading to considerable annoyance and distress among the public and can generate citizen complaints to local governments and air districts. Due to the subjective nature of odor impacts, the number of variables that can influence the potential for an odor impact, and the variety of odor sources, quantitative or formulaic methodologies to determine the presence of a significant odor impact are difficult.

Adverse effects of odors on residential areas and other sensitive receptors warrant the closest scrutiny; but consideration should also be given to other land use types where people congregate, such as recreational facilities, worksites, and commercial areas. The potential for an odor impact is dependent on a number of variables including the nature of the odor source, distance between a receptor and an odor source, and local meteorological conditions.

One of the most important factors influencing the potential for an odor impact to occur is the distance between the odor source and receptors, also referred to as a buffer zone or setback. The greater the distance between an odor source and receptor, the less concentrated the odor emission would be when reaching the receptor. Meteorological conditions also affect the dispersion of odor emissions, which determines the exposure concentration of odiferous compounds at receptors. The predominant wind direction in an area influences which receptors are exposed to the odiferous compounds generated by a nearby source. Receptors located upwind from a large odor source may not be affected due to the produced odiferous compounds being dispersed away from the receptors. Wind speed also influences the degree to which odor emissions are dispersed away from any area.

Odiferous compounds could be generated from a variety of source types including both construction and operational activities. Examples of common land use types that typically generate significant odor impacts include, but are not limited to, wastewater treatment plants; composting/green waste facilities; recycling facilities; petroleum refineries; chemical manufacturing plants; painting/coating operations; rendering plants; and food packaging plants.



Although less common, diesel fumes associated with operation of substantial diesel-fueled equipment and heavy-duty trucks, such as from construction activities, freeway traffic, or distribution centers, can be found to be objectionable.

Sensitive Receptors

Some land uses are considered more sensitive to air pollution than others, due to the types of population groups or activities involved. Children, pregnant women, the elderly, and those with existing health problems are especially vulnerable to the effects of air pollution. Accordingly, land uses that are typically considered to be sensitive receptors include residences, schools, day care centers, playgrounds, and medical facilities. The nearest off-site existing sensitive receptors to the project site would be the single-family residences along the western and northern site borders, as well as the various agricultural-related single-family residences in the vicinity, the closest of which are located approximately 50 feet from the project site.

Greenhouse Gas Emissions

GHGs are gases that absorb and emit radiation within the thermal infrared range, trapping heat in the Earth's atmosphere. Some GHGs occur naturally and are emitted into the atmosphere through both natural processes and human activities. Other GHGs are created and emitted solely through human activities. The principal GHGs that enter the atmosphere due to human activities are carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), and fluorinated carbons. Other common GHGs include water vapor, ozone, and aerosols. The increase in atmospheric concentrations of GHG due to human activities has resulted in more heat being held within the atmosphere, which is the accepted explanation for global climate change.

The primary GHG emitted by human activities is CO₂, with the next largest components being CH₄ and N₂O. A wide variety of human activities result in the emission of CO₂. Some of the largest sources of CO₂ include the burning of fossil fuels for transportation and electricity, industrial processes including fertilizer production, agricultural processing, and cement production. The primary sources of CH₄ emissions include domestic livestock sources, decomposition of wastes in landfills, releases from natural gas systems, coal mine seepage, and manure management. The main human activities producing N₂O are agricultural soil management, fuel combustion in motor vehicles, nitric acid production, manure management, and stationary fuel combustion. Emissions of GHG by economic sector indicate that energy-related activities account for the majority of U.S. emissions. Electricity generation is the largest single-source of GHG emissions, and transportation is the second largest source, followed by industrial activities. The agricultural, commercial, and residential sectors account for the remainder of GHG emission sources.⁷

Emissions of GHG are partially offset by uptake of carbon and sequestration in trees, agricultural soils, landfilled yard trimmings and food scraps, and absorption of CO₂ by the Earth's oceans. Additional emission reduction measures for GHG could include, but are not limited to, compliance with local, State, or federal plans or strategies for GHG reductions, on-site and off-site mitigation, and project design features. Attainment concentration standards for GHGs have not been established by the federal or State government.

⁷ U.S. Environmental Protection Agency. *Sources of Greenhouse Gas Emissions*. Available at: <https://www.epa.gov/ghgemissions/sources-greenhouse-gas-emissions>. Accessed March 2022.



Global Warming Potential

Global warming potential (GWP) is one type of simplified index (based upon radiative properties) that can be used to estimate the potential future impacts of emissions of various gases. According to the USEPA, the GWP of a gas, or aerosol, to trap heat in the atmosphere is the “cumulative radiative forcing effects of a gas over a specified time horizon resulting from the emission of a unit mass of gas relative to a reference gas.” The reference gas for comparison is CO₂. GWP is based on a number of factors, including the heat-absorbing ability of each gas relative to that of CO₂, as well as the decay rate of each gas relative to that of CO₂. Each gas’s GWP is determined by comparing the radiative forcing associated with emissions of that gas versus the radiative forcing associated with emissions of the same mass of CO₂, for which the GWP is set at one. Methane gas, for example, is estimated by the USEPA to have a comparative global warming potential 25 times greater than that of CO₂, as shown in Table 4.3-5.

As shown in the table, at the extreme end of the scale, sulfur hexafluoride is estimated to have a comparative GWP 22,800 times that of CO₂. The atmospheric lifetimes of such GHGs are estimated by the USEPA to vary from 50 to 200 years for CO₂, to 50,000 years for CF₄. Longer atmospheric lifetimes allow GHG to buildup in the atmosphere; therefore, longer lifetimes correlate with the GWP of a gas. The common indicator for GHG is expressed in terms of metric tons of CO₂ equivalents (MTCO₂e), which is calculated based on the GWP for each pollutant.

Table 4.3-5 GWPs and Atmospheric Lifetimes of Select GHGs		
Gas	Atmospheric Lifetime (years)	GWP (100 year time horizon)
Carbon Dioxide (CO ₂)	See footnote ¹	1
Methane (CH ₄)	12	25
Nitrous Oxide (N ₂ O)	114	298
HFC-23	230	14,800
HFC-134a	14	1,430
HFC-152a	1.4	124
PFC: Tetrafluoromethane (CF ₄)	50,000	7,390
PFC: Hexafluoroethane (C ₂ F ₆)	10,000	12,200
Sulfur Hexafluoride (SF ₆)	3,200	22,800
^{1.} For a given amount of CO ₂ emitted, some fraction of the atmospheric increase in concentration is quickly absorbed by the oceans and terrestrial vegetation, some fraction of the atmospheric increase will only slowly decrease over a number of years, and a small portion of the increase will remain for many centuries or more.		
Source: U.S. Environmental Protection Agency. Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990-2019 [Table 1-2]. April 14, 2021		

Effects of Global Climate Change

Globally, climate change has the potential to affect numerous environmental resources through uncertain impacts related to future air temperatures and precipitation patterns. The Intergovernmental Panel on Climate Change’s (IPCC) *Climate Change 2021: The Physical Science Basis* report indicated that warming of the climate system is unequivocal, and since the 1950s, many of the observed changes are unprecedented over decades to millennia.⁸ Signs that global climate change has occurred include:

⁸ Intergovernmental Panel on Climate Change. *Climate Change 2021: The Physical Science Basis Summary for Policymakers*. Available at: <https://www.ipcc.ch/report/sixth-assessment-report-working-group-i/>. Accessed March 2022.



- Warming of the atmosphere and ocean;
- Diminished amounts of snow and ice;
- Rising sea levels; and
- Ocean acidification.

Although climate change is driven by global atmospheric conditions, climate change impacts are felt locally. A scientific consensus confirms that climate change is already affecting California. The Office of Environmental Health Hazard Assessment (OEHHA) identified various indicators of climate change in California, which are scientifically based measurements that track trends in various aspects of climate change. Many indicators reveal discernable evidence that climate change is occurring in California and is having significant, measurable impacts in the State. Changes in the State's climate have been observed, including:

- An increase in annual average air temperature with record warmth from 2012 to 2016;
- More frequent extreme heat events;
- More extreme drought;
- A decline in winter chill; and
- An increase in variability of statewide precipitation.

Warming temperatures and changing precipitation patterns have altered California's physical systems—the ocean, lakes, rivers and snowpack—upon which the State depends. Winter snowpack and spring snowmelt runoff from the Sierra Nevada and southern Cascade Mountains provide approximately one-third of the State's annual water supply. Impacts of climate on physical systems have been observed, such as high variability of snow-water content (i.e., amount of water stored in snowpack), decrease in snowmelt runoff, glacier change (loss in area), rise in sea levels, increase in average lake water temperature and coastal ocean temperature, and a decrease in dissolved oxygen in coastal waters. Impacts of climate change on biological systems, including humans, wildlife, and vegetation, have also been observed, including climate change impacts on terrestrial, marine, and freshwater ecosystems.

As noted in the City of Manteca General Plan Update Environmental Impact Report, climate change in California may result in mass migration of species, or failure of species to migrate in time to adapt to the perturbations in climate, public health issues related to air pollution, wildfire, and extreme heat, changes to the reliability of water resources, reduced quality of agriculture resources and forests, and rises in sea level.⁹

In the City of Manteca, specifically, the number of extreme heat days (defined as days where temperatures exceed 103.3 F) could reach an average of 41 days per year, as compared to the four days per year that occur now. While California could not see the average annual precipitation changing significantly in the next 50 to 75 years, precipitation could likely be delivered in more intense storms and within a shorter wet season. For example, the 30-year average length of dry spell in the City is 125 days. By the end of the century, the average dry spell could be up to 151 days.¹⁰

⁹ City of Manteca. *Environmental Impact Report for the Manteca General Plan Update (SCH: 2020019010)* [pg 3.7-2 to 3.7-5]. March 2021.

¹⁰ Cal-Adapt. *Local Climate Change Snapshot for Manteca, California*. Available at: <https://cal-adapt.org/tools/local-climate-change-snapshot>. Accessed March 2022.



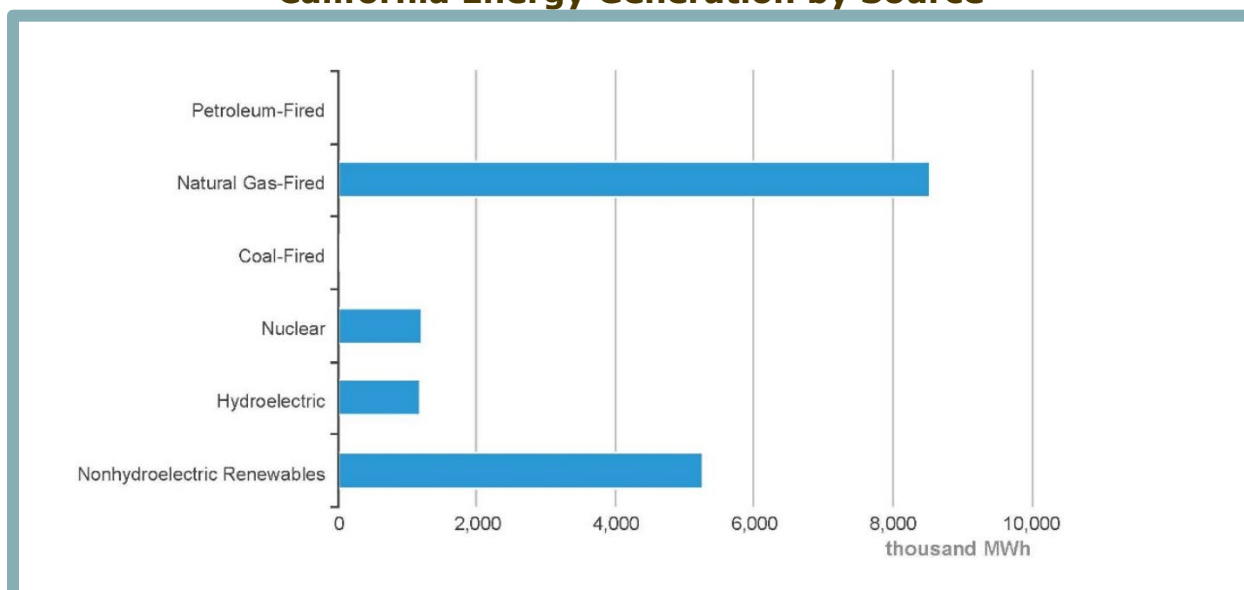
Energy Use

California is one of the highest energy demanding states within the nation. In the year 2020, the entire State consumed approximately 279,510.01 gigawatt-hours (GWh) of electricity. Activities such as heating and cooling structures, lighting, the movement of goods, agricultural production, and other facets of daily life consume a variety of energy sources. However, despite California's high rate of energy use, the State has one of the lowest per capita energy consumption levels in the U.S.

Energy within the State is provided primarily to consumers through a mix of sources including natural gas, hydroelectric, non-hydroelectric renewable sources, nuclear, coal, and petroleum. California is the nation's top producer of electricity from solar, geothermal, and biomass energy. In 2019, the State was also the nation's second-largest producer of electricity from conventional hydroelectric power and the fifth largest from wind energy. Renewable resources, including hydropower and small-scale (less than 1-megawatt), customer-sited solar photovoltaic (PV) systems, supplied more than half of California's in-state electricity generation, and natural gas-fired power plants provided two-fifths.

Figure 4.3-1 presents the sources that are used to produce energy in the State. As presented therein, energy is mostly generated from natural gas combustion, followed by non-hydroelectric renewables (such as wind and solar) and hydroelectric. Figure 4.3-2 presents energy consumption within California for the most recent year for which data is available (2019). As shown in the figure, transportation-related activity consumes the largest single share of energy within the State. The second largest consumer is the industrial sector.

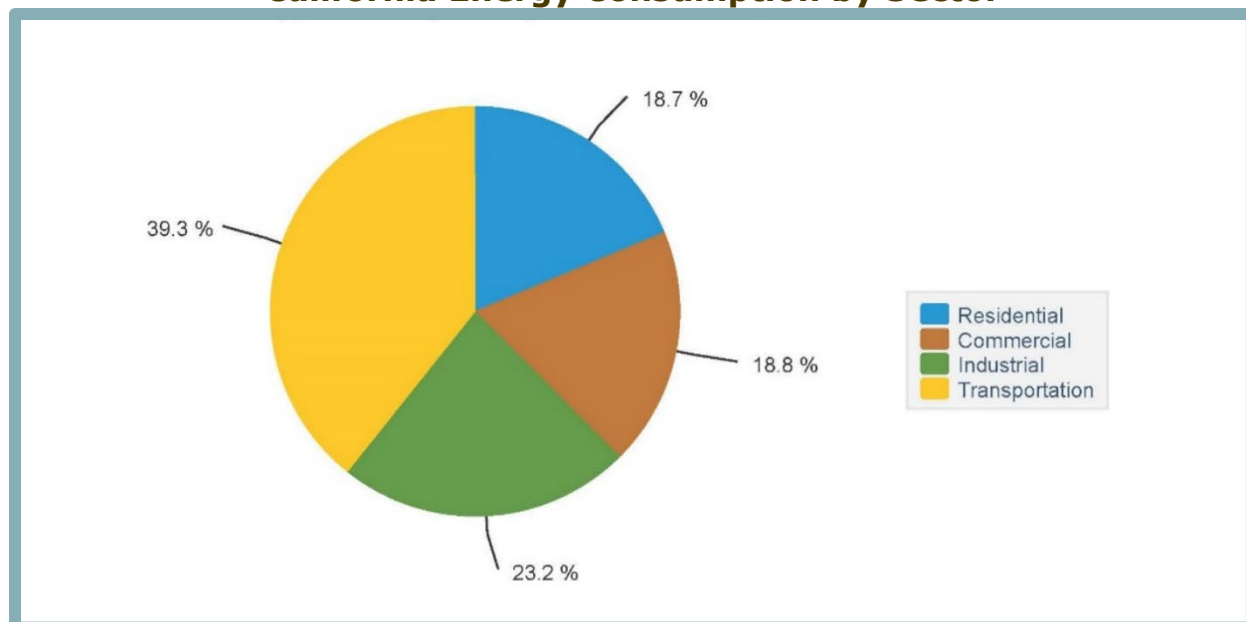
Figure 4.3-1
California Energy Generation by Source



Source: U.S. Energy Information Administration. *California: State Profile and Energy Estimates*. Accessible at: <https://www.eia.gov/state/index.php?sid=CA>. Accessed February 2022.



**Figure 4.3-2
 California Energy Consumption by Sector**



Source: U.S. Energy Information Administration. *California: State Profile and Energy Estimates*. Accessible at: <https://www.eia.gov/state/index.php?sid=CA>. Accessed February 2022.

In the year 2020, San Joaquin County consumed approximately 5,736.9 GWh, which constitutes approximately 2.1 percent of the total energy consumed within the State that year.¹¹ The project site is primarily vacant, except the eastern portion is currently developed with vineyards and a large barn, an office structure, a tree-lined driveway, and a 20,000-square-foot (sf) residence. As a result, the only energy demand associated with the project site results from operations of the office structure and the residential unit.

4.3.3 REGULATORY SETTING

Air quality, GHG emissions, and energy are monitored and regulated through the efforts of various international, federal, State, and local government agencies. Agencies work jointly and individually to improve air quality through legislation, regulations, planning, policy-making, education, and a variety of programs. The agencies responsible for regulating and improving the air quality within the project area and monitoring or reducing GHG emissions and energy consumption are discussed below.

Federal Regulations Related to Air Quality

The following discussion provides a summary of the federal regulations relevant to air quality, organized by pollutant type.

Criteria Pollutants

The FCAA, passed in 1970 and last amended in 1990, forms the basis for the national air pollution control effort. The USEPA is responsible for implementing most aspects of the FCAA, including

¹¹ California Energy Commission. *Electricity Consumption by County*. Available at: <http://ecdms.energy.ca.gov/elecbycounty.aspx>. Accessed February 2022.



setting NAAQS for major air pollutants; setting hazardous air pollutant standards; approving state attainment plans; setting motor vehicle emission standards; issuing stationary source emission standards and permits; and establishing acid rain control measures, stratospheric O₃ protection measures, and enforcement provisions. Under the FCAA, NAAQS are established for the following criteria pollutants: O₃, CO, NO₂, SO₂, PM₁₀, PM_{2.5}, and lead.

The NAAQS describe acceptable air quality conditions designed to protect the health and welfare of the citizens of the nation. The NAAQS (other than for O₃, NO₂, SO₂, PM₁₀, PM_{2.5}, and those based on annual averages or arithmetic mean) are not to be exceeded more than once per year. NAAQS for O₃, NO₂, SO₂, PM₁₀, PM_{2.5} are based on statistical calculations over one- to three-year periods, depending on the pollutant. The FCAA requires the USEPA to reassess the NAAQS at least every five years to determine whether adopted standards are adequate to protect public health based on current scientific evidence. States with areas that exceed the NAAQS must prepare a state implementation plan that demonstrates how those areas will attain the standards within mandated time frames.

Hazardous Air Pollutants/Toxic Air Contaminants

The 1977 FCAA amendments required the USEPA to identify national emission standards for hazardous air pollutants to protect public health and welfare. Hazardous air pollutants include certain volatile organic chemicals, pesticides, herbicides, and radionuclides that present a tangible hazard, based on scientific studies of exposure to humans and other mammals. Under the 1990 FCAA Amendments, which expanded the control program for hazardous air pollutants, 189 substances and chemical families were identified as hazardous air pollutants.

Federal Regulations Related to GHG Emissions

The following are the federal regulations relevant to GHG emissions.

Federal Vehicle Standards

In 2010, President Obama issued a memorandum directing the Department of Transportation, Department of Energy, USEPA, and National Highway Traffic Safety Administration (NHTSA) to establish additional standards regarding fuel efficiency and GHG reduction, clean fuels, and advanced vehicle infrastructure. In response to this directive, the USEPA and NHTSA proposed stringent, coordinated federal GHG and fuel economy standards for model years 2017 through 2025 light-duty vehicles. The proposed standards were projected to achieve emission rates as low as 163 grams of CO₂ per mile by model year 2025 on an average industry fleet-wide basis, which is equivalent to 54.5 miles per gallon if the foregoing emissions level was achieved solely through fuel efficiency. The final rule was adopted in 2012 for model years 2017 through 2021 (77 FR 62624–63200), and NHTSA intended to set standards for model years 2022 through 2025 in future rulemaking.

In August 2016, the USEPA and NHTSA announced the adoption of the phase two program related to the fuel economy and GHG standards for medium- and heavy-duty trucks. The phase two program would have applied to vehicles with model years 2018 through 2027 for certain trailers, and model years 2021 through 2027 for semi-trucks, large pickup trucks, vans, and all types of sizes of buses and work trucks. The final standards were expected to lower CO₂ emissions by approximately 1.1 billion metric tons (MT), and reduce oil consumption by up to two billion barrels over the lifetime of the vehicles sold under the program.



In August 2018, the USEPA and NHTSA proposed to amend certain fuel economy and GHG standards for passenger cars and light trucks and establish new, less-stringent standards for model years 2021 through 2026. Compared to maintaining the post-2020 standards that were previously in place, the 2018 proposal would increase U.S. fuel consumption by approximately 0.5 million barrels per day, and would impact the global climate by 3/1000th of 1°C by 2100. California and other states stated their intent to challenge federal actions that would delay or eliminate GHG reduction measures, and committed to cooperating with other countries to implement global climate change initiatives.

On September 27, 2019, the USEPA and NHTSA published the *Safer Affordable Fuel-Efficient (SAFE) Vehicles Rule Part One: One National Program* (84 FR 51,310), which became effective November 26, 2019. The Part One Rule revokes California's authority to set its own GHG emissions standards and set zero-emission-vehicle mandates in California. On March 31, 2020, the USEPA and NHTSA issued the Part Two Rule, which sets CO₂ emissions standards and corporate average fuel economy standards for passenger vehicles and light-duty trucks for model years 2021 through 2026. On January 20, 2021, President Joe Biden issued an Executive Order (EO) on Protecting Public Health and the Environment and Restoring Science to Tackle the Climate Crisis, which includes review of the Part One Rule by April 2021 and review of the Part Two Rule by July 2021. In response to the Part One Rule, in December 2021, the U.S. Department of Transportation withdrew its portions of the "SAFE I" rule. As a result, States are now allowed to issue their own GHG emissions standards and zero-emissions vehicle mandates.¹² In addition, the Part Two Rule was adopted to revise the existing national GHG emission standards for passenger cars and light trucks through model year 2026. These standards are the strongest vehicle emissions standards ever established for the light-duty vehicle sector and will result in avoiding more than 3 billion tons of GHG emissions through 2050.¹³

Federal Regulations Related to Energy

The following are the federal regulations relevant to energy.

Energy Policy and Conservation Act

The Energy Policy and Conservation Act was originally enacted in 1975 with the intention of ensuring that all vehicles sold in the U.S. meet established fuel economy standards. Following congressional establishment of the original set of fuel economy standards the U.S. Department of Transportation was tasked with establishing additional on-road vehicle standards and making revisions to standards as necessary. Compliance with established standards is based on manufacturer fleet average fuel economy, which originally applied to both passenger cars and light trucks but did not apply to heavy-duty vehicles exceeding 8,500 pounds in gross vehicle weight. The fuel economy program implemented under the Energy Policy and Conservation Act is known as the Corporate Average Fuel Economy (CAFE) Standards. Updates to the CAFE standards since original implementation have increased fuel economy requirements and begun regulation of medium- and heavy-duty vehicles.

¹² National Highway Traffic Safety Administration. *In Removing Major Roadblock to State Action on Emissions Standards, U.S. Department of Transportation Advances Biden-Harris Administration's Climate and Jobs Goals*. Available at: <https://www.nhtsa.gov/press-releases/cafe-preemption-final-rule>. Accessed March 2022.

¹³ U.S. Environmental Protection Agency. *Final Rule to Revise Existing National GHG Emissions Standards for Passenger Cars and Light Trucks Through Model Year 2026*. Available at: <https://www.epa.gov/regulations-emissions-vehicles-and-engines/final-rule-revise-existing-national-ghg-emissions>. Accessed March 2022.



Energy Policy Act of 2005

The Energy Policy Act of 2005 addressed energy production in the U.S. from various sources. In particular, the Energy Policy Act of 2005 included tax credits, loans, and grants for the implementation of energy systems that would reduce GHG emissions related to energy production.

State Regulations Related to Air Quality

The following discussion summarized applicable State regulations related to air quality, organized by pollutant type. Only the most prominent and applicable California air quality-related legislation is included below; however, an exhaustive list and extensive details of California air quality legislation can be found at the CARB website (<http://www.arb.ca.gov/html/lawsregs.htm>).

Criteria Air Pollutants

The FCAA delegates the regulation of air pollution control and the enforcement of the NAAQS to the states. In California, the task of air quality management and regulation has been legislatively granted to CARB, with subsidiary responsibilities assigned to air quality management districts and air pollution control districts at the regional and county levels. CARB, which became part of the California Environmental Protection Agency in 1991, is responsible for ensuring implementation of the CCAA of 1988, responding to the FCAA, and regulating emissions from motor vehicles and consumer products.

CARB has established CAAQS, which are generally more restrictive than the NAAQS. The CAAQS describe adverse conditions; that is, pollution levels must be below these standards before a basin can attain the standard. Air quality is considered “in attainment” if pollutant levels are continuously below the CAAQS and do not violate the standards more than once each year. The CAAQS for O₃, CO, SO₂ (one-hour and 24-hour), NO₂, PM₁₀, PM_{2.5}, and visibility-reducing particles are values that are not to be exceeded. All others are not to be equaled or exceeded. The NAAQS and CAAQS are presented in Table 4.3-2.

Hazardous Air Pollutants/Toxic Air Contaminants

The State Air Toxics Program was established in 1983 under Assembly Bill (AB) 1807 (Tanner), and involved definition of a list of TACs. The California TAC list identifies more than 700 pollutants, of which carcinogenic and noncarcinogenic toxicity criteria have been established for a subset of these pollutants pursuant to the California Health and Safety Code. The State list of TACs includes the federally-designated hazardous air pollutants. In 1987, the Legislature enacted the Air Toxics “Hot Spots” Information and Assessment Act of 1987 (AB 2588) to address public concern over the release of TACs into the atmosphere. AB 2588 law requires facilities emitting toxic substances to provide local air pollution control districts with information that will allow an assessment of the air toxics problem, identification of air toxics emissions sources, location of resulting hot spots, notification of the public exposed to significant risk, and development of effective strategies to reduce potential risks to the public over five years. TAC emissions from individual facilities are quantified and prioritized. “High-priority” facilities are required to perform a health risk assessment, and, if specific thresholds are exceeded, the facility operator is required to communicate the results to the public in the form of notices and public meetings.

CARB Air Quality and Land Use Handbook

CARB’s *Air Quality and Land Use Handbook: A Community Health Perspective* (CARB Handbook) addresses the importance of considering health risk issues when siting sensitive land uses, including residential development, in the vicinity of intensive air pollutant emission



sources including freeways or high-traffic roads, distribution centers, ports, petroleum refineries, chrome plating operations, dry cleaners, and gasoline dispensing facilities.¹⁴ The CARB Handbook draws upon studies evaluating the health effects of traffic traveling on major interstate highways in metropolitan California centers within Los Angeles (I-405 and I-710), the San Francisco Bay, and San Diego areas. The recommendations identified by CARB, including siting residential uses a minimum distance of 500 feet from freeways or other high-traffic roadways, are consistent with those adopted by the State of California for location of new schools. Specifically, the CARB Handbook recommends, “Avoid siting new sensitive land uses within 500 feet of a freeway, urban roads with 100,000 vehicles/day, or rural roads with 50,000 vehicles/day”.¹⁵

Importantly, the Introduction chapter of the CARB Handbook clarifies that the guidelines are strictly advisory, recognizing that: “[I]and use decisions are a local government responsibility. The Air Resources Board Handbook is advisory and these recommendations do not establish regulatory standards of any kind.” CARB recognizes that there may be land use objectives as well as meteorological and other site-specific conditions that need to be considered by a governmental jurisdiction relative to the general recommended setbacks, specifically stating, “[t]hese recommendations are advisory. Land use agencies have to balance other considerations, including housing and transportation needs, economic development priorities, and other quality of life issues”.¹⁶

Diesel Particulate Matter

In 2000, CARB approved a comprehensive diesel risk reduction plan to reduce diesel emissions, including DPM, from new and existing diesel-fueled vehicles and engines. The regulation is anticipated to result in an 80 percent decrease in statewide diesel health risk by 2020 compared with the diesel risk in 2000. Additional regulations apply to new trucks and diesel fuel, including the On-Road Heavy Duty Diesel Vehicle (In-Use) Regulation, the On-Road Heavy Duty (New) Vehicle Program, the In-Use Off-Road Diesel Vehicle Regulation, and the New Off-Road Compression-Ignition (Diesel) Engines and Equipment program. The aforementioned regulations and programs have timetables by which manufacturers must comply and existing operators must upgrade their diesel-powered equipment. Several Airborne Toxic Control Measures (ATCMs) exist that reduce diesel emissions, including In-Use Off-Road Diesel-Fueled Fleets (13 California Code of Regulations [CCR] 2449 et seq.) and In-Use On-Road Diesel-Fueled Vehicles (13 CCR 2025).

Heavy-Duty Diesel Truck and Bus Regulation

CARB adopted the final Heavy-Duty Truck and Bus Regulation, Title 13, Division 3, Chapter 1, Section 2025, on December 31, 2014, to reduce DPM and NO_x emissions from heavy-duty diesel vehicles. The rule requires nearly all diesel trucks and buses to be compliant with the 2010 model year engine requirement by January 1, 2023. CARB also adopted an ATCM to limit idling of diesel-fueled commercial vehicles on December 12, 2013. The rule requires diesel-fueled vehicles with gross vehicle weights greater than 10,000 pounds to idle no more than five minutes at any location (13 CCR 2485).

¹⁴ California Air Resources Board. *Air Quality and Land Use Handbook: A Community Health Perspective*. April 2005.

¹⁵ *Ibid.*

¹⁶ *Ibid.*



California Health and Safety Code Section 41700

Section 41700 of the Health and Safety Code states that a person must not discharge from any source whatsoever quantities of air contaminants or other material that cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public; or that endanger the comfort, repose, health, or safety of any of those persons or the public; or that cause, or have a natural tendency to cause, injury or damage to business or property. Section 41700 also applies to sources of objectionable odors.

Heavy-Duty Vehicle Idling Emission Reduction Program

On October 20, 2005, CARB approved a regulatory measure to reduce emissions of toxics and criteria pollutants by limiting idling of new and in-use sleeper berth equipped diesel trucks.¹⁷ The regulation established new engine and in-use truck requirements and emission performance requirements for technologies used as alternatives to idling the truck's main engine. For example, the regulation requires 2008 and newer model year heavy-duty diesel engines to be equipped with a non-programmable engine shutdown system that automatically shuts down the engine after five minutes of idling, or optionally meet a stringent NO_x emission standard. The regulation also requires operators of both in-state and out-of-state registered sleeper berth equipped trucks to manually shut down their engine when idling more than five minutes at any location within California. Emission producing alternative technologies such as diesel-fueled auxiliary power systems and fuel-fired heaters are also required to meet emission performance requirements that ensure emissions are not exceeding the emissions of a truck engine operating at idle.

In-Use Off-Road Diesel Vehicle Regulation

On July 26, 2007, CARB adopted a regulation to reduce DPM and NO_x emissions from in-use (existing), off-road, heavy-duty diesel vehicles in California.¹⁸ Such vehicles are used in construction, mining, and industrial operations. The regulation is designed to reduce harmful emissions from vehicles by subjecting fleet owners to retrofit or accelerated replacement/repower requirements, imposing idling limitations on owners, operators, renters, or lessees of off-road diesel vehicles. The idling limits require operators of applicable off-road vehicles (self-propelled diesel-fueled vehicles 25 horsepower and up that were not designed to be driven on-road) to limit idling to less than five minutes. The idling requirements are specified in Title 13 of the CCR.

State Regulations Related to GHG Emissions

The statewide GHG emissions regulatory framework is summarized below. The following text describes EOs, legislation, regulations, and other plans and policies that would directly or indirectly reduce GHG emissions and/or address climate change issues. It is noted that the following discussion is not exhaustive, and only the most prominent and applicable California air quality-related legislation is included below.

State Climate Change Targets

California has taken a number of actions to address climate change, including EOs, legislation, and CARB plans and requirements, which are summarized below.

¹⁷ California Air Resources Board. *Airborne Toxic Control Measure to Limit Diesel-Fueled Commercial Motor Vehicle Idling*. Available at: <https://ww2.arb.ca.gov/our-work/programs/atcm-to-limit-vehicle-idling/about>. Accessed March 2022.

¹⁸ California Air Resources Board. *In-Use Off-Road Diesel Vehicle Regulation*. Available at: <https://ww2.arb.ca.gov/our-work/programs/use-road-diesel-fueled-fleets-regulation>. Accessed March 2022.



EO S-3-05

EO S-3-05 (June 2005) established California's GHG emissions reduction targets and laid out responsibilities among the State agencies for implementing the EO and for reporting on progress toward the targets. The EO established the following targets:

- By 2010, reduce GHG emissions to 2000 levels;
- By 2020, reduce GHG emissions to 1990 levels; and
- By 2050, reduce GHG emissions to 80 percent below 1990 levels.

EO S-3-05 also directed the California EPA to report biannually on progress made toward meeting the GHG targets and the impacts to California due to global warming, including impacts to water supply, public health, agriculture, the coastline, and forestry. The Climate Action Team was formed, which subsequently issued reports from 2006 to 2010.

AB 32

In furtherance of the goals established in EO S-3-05, the Legislature enacted AB 32 (Núñez and Pavley). The bill is referred to as the California Global Warming Solutions Act of 2006 (September 27, 2006). AB 32 provided initial direction on creating a comprehensive, multi-year program to limit California's GHG emissions at 1990 levels by 2020 and initiate the transformations required to achieve the State's long-range climate objectives. AB 32 also required that the CARB prepare a "scoping plan" for achieving the maximum technologically feasible and cost-effective GHG emission reductions by 2020. The CARB's Scoping Plan is described in further detail below.

EO B-30-15

EO B-30-15 (April 2015) identified an interim GHG reduction target in support of targets previously identified under EO S-3-05 and AB 32. EO B-30-15 set an interim target goal of reducing GHG emissions to 40 percent below 1990 levels by 2030 to keep California on its trajectory toward meeting or exceeding the long-term goal of reducing GHG emissions to 80 percent below 1990 levels by 2050 as set forth in EO S-3-05. To facilitate achieving this goal, EO B-30-15 called for an update to the CARB's *Climate Change Scoping Plan: A Framework for Change* (Scoping Plan) to express the 2030 target in terms of million metric tons (MMT) CO₂e. The CARB's Scoping Plan is discussed in further detail below. The EO also called for State agencies to continue to develop and implement GHG emission reduction programs in support of the reduction targets.

Senate Bill (SB) 32 and AB 197

SB 32 and AB 197 (enacted in 2016) are companion bills. SB 32 codified the 2030 emissions reduction goal of EO B-30-15 by requiring CARB to ensure that statewide GHG emissions are reduced to 40 percent below 1990 levels by 2030. AB 197 established the Joint Legislative Committee on Climate Change Policies, consisting of at least three members of the Senate and three members of the Assembly, to provide ongoing oversight over implementation of the State's climate policies. AB 197 also added two members of the Legislature to the Board as non-voting members; requires CARB to make available and update (at least annually via the CARB's website) emissions data for GHGs, criteria air pollutants, and TACs from reporting facilities; and requires CARB to identify specific information for GHG emissions reduction measures when updating the Scoping Plan.

CARB's Climate Change Scoping Plan

One specific requirement of AB 32 is for CARB to prepare a scoping plan for achieving the maximum technologically feasible and cost-effective GHG emission reductions by 2020 (Health



and Safety Code Section 38561[a]), and to update the Scoping Plan at least once every five years. In 2008, CARB approved the first Scoping Plan. The Scoping Plan included a mix of recommended strategies that combined direct regulations, market-based approaches, voluntary measures, policies, and other emission reduction programs calculated to meet the 2020 statewide GHG emission limit and initiate the transformations needed to achieve the State's long-range climate objectives. The key elements of the Scoping Plan include the following:

1. Expanding and strengthening existing energy efficiency programs as well as building and appliance standards;
2. Achieving a statewide renewable energy mix of 33 percent;
3. Developing a California cap-and-trade program that links with other Western Climate Initiative partner programs to create a regional market system and caps sources contributing 85 percent of California's GHG emissions;
4. Establishing targets for transportation-related GHG emissions for regions throughout California, and pursuing policies and incentives to achieve those targets;
5. Adopting and implementing measures pursuant to existing State laws and policies, including California's clean car standards, goods movement measures, and the Low Carbon Fuel Standard (LCFS) (17 CCR, Section 95480 et seq.); and
6. Creating targeted fees, including a public goods charge on water use, fees on high GWP gases, and a fee to fund the administrative costs of the State's long-term commitment to AB 32 implementation.

The Scoping Plan also identified local governments as essential partners in achieving California's goals to reduce GHG emissions because they have broad influence and, in some cases, exclusive authority over activities that contribute to significant direct and indirect GHG emissions through their planning and permitting processes, local ordinances, outreach and education efforts, and municipal operations. Specifically, the Scoping Plan encouraged local governments to adopt a reduction goal for municipal operations and for community emissions to reduce GHGs by approximately 15 percent from then levels (2008) by 2020. Many local governments developed community-scale local GHG reduction plans based on this Scoping Plan recommendation.

In 2014, CARB approved the first update to the Scoping Plan. The *First Update to the Climate Change Scoping Plan: Building on the Framework* (First Update) defined the State's GHG emission reduction priorities for the next five years and laid the groundwork to start the transition to the post-2020 goals set forth in EO S-3-05 and EO B-16-2012. The First Update concluded that California is on track to meet the 2020 target but recommended a 2030 mid-term GHG reduction target be established to ensure a continuation of action to reduce emissions. The First Update recommended a mix of technologies in key economic sectors to reduce emissions through 2050, including energy demand reduction through efficiency and activity changes; large-scale electrification of on-road vehicles, buildings, and industrial machinery; decarbonizing electricity and fuel supplies; and the rapid market penetration of efficient and clean energy technologies. As part of the First Update, CARB recalculated the State's 1990 emissions level using more recent GWPs identified by the Intergovernmental Panel on Climate Change, from 427 MMT CO₂e to 431 MMT CO₂e.

In 2015, as directed by EO B-30-15, CARB began working on an update to the Scoping Plan to incorporate the 2030 target of 40 percent below 1990 levels by 2030 to keep California on a trajectory toward meeting or exceeding the long-term goal of reducing GHG emissions to 80 percent below 1990 levels by 2050, as set forth in EO S-3-05. Governor Jerry Brown called on California to pursue a new and ambitious set of strategies, in line with the five climate change



pillars from his inaugural address, to reduce GHG emissions and prepare for the unavoidable impacts of climate change. In summer 2016, the Legislature affirmed the importance of addressing climate change through passage of SB 32 (Pavley, Chapter 249, Statutes of 2016).

In December 2017, CARB adopted California's *2017 Climate Change Scoping Plan* (2017 Scoping Plan) for public review and comment. The 2017 Scoping Plan builds on the successful framework established in the initial Scoping Plan and First Update while identifying new, technologically feasible and cost-effective strategies that will serve as the framework to achieve the 2030 GHG target as established by SB 32 and define the State's climate change priorities to 2030 and beyond. Strategies within the 2017 Scoping Plan include implementing renewable energy and energy efficiency measures, increased stringency of the LCFS, measures identified in the Mobile Source and Freight Strategies, measures identified in the proposed Short-Lived Climate Pollutant (SLCP) Plan, and increased stringency of SB 375 targets (discussed in further detail below). To fill the gap in additional reductions needed to achieve the 2030 target, the 2017 Scoping Plan recommends continuing the Cap-and-Trade Program and a measure to reduce GHGs from refineries by 20 percent.

For local governments, the 2017 Scoping Plan replaced the initial Scoping Plan's 15 percent reduction goal with a recommendation to aim for a community-wide goal of no more than six MT CO₂e per capita by 2030, and no more than two MT CO₂e per capita by 2050, which are consistent with the State's long-term goals. Such goals are also consistent with the Under 2 Memorandum of Understanding (Under 2 Coalition 2019) and the Paris Agreement, which were developed around the scientifically based levels necessary to limit global warming to below an increase of 2°C. The 2017 Scoping Plan recognized the benefits of local government GHG planning (e.g., through Climate Action Plans [CAPs]) and provide more information regarding tools CARB is working on to support those efforts. The 2017 Scoping Plan also recognizes the CEQA streamlining provisions for project-level review where a legally adequate CAP exists.

When discussing project-level GHG emissions reduction actions and thresholds in the context of CEQA, the 2017 Scoping Plan states that "achieving no net additional increase in GHG emissions, resulting in no contribution to GHG impacts, is an appropriate overall objective for new development" for project-level CEQA analysis, but also recognizes that such a standard may not be appropriate or feasible for every development project. The 2017 Scoping Plan further provides that "the inability of a project to mitigate its GHG emissions to net zero does not imply the project results in a substantial contribution to the cumulatively significant environmental impact of climate change under CEQA."

An update to the 2017 Scoping Plan, the 2022 Scoping Plan Update, is currently being drafted by the CARB.

CARB's Regulations for the Mandatory Reporting of GHG Emissions

CARB's Regulation for the Mandatory Reporting of GHG Emissions (17 CCR 95100–95157) incorporated by reference certain requirements that the USEPA promulgated in its Final Rule on Mandatory Reporting of GHGs (40 Code of Federal Regulations [CFR] Part 98). In general, entities subject to the Mandatory Reporting Regulation that emit more than 10,000 MTCO₂e per year are required to report annual GHGs through the California Electronic GHG Reporting Tool. Certain sectors, such as refineries and cement plants, are required to report regardless of emission levels. Entities that emit more than the 25,000 MTCO₂e per year threshold are required to have their GHG emission report verified by a CARB-accredited third party.



SB 1383

SB 1383 establishes specific targets for the reduction of SLCPs (40 percent below 2013 levels by 2030 for CH₄ and HFCs, and 50 percent below 2013 levels by 2030 for anthropogenic black carbon), and provides direction for reductions from dairy and livestock operations and landfills. Accordingly, CARB adopted its SLCP Reduction Strategy in March 2017. The SLCP Reduction Strategy establishes a framework for the statewide reduction of emissions of black carbon, CH₄, and fluorinated gases.

EO B-55-18

EO B-55-18 (September 2018) establishes a statewide policy for California to achieve carbon neutrality as soon as possible, and no later than 2045, and achieve and maintain net-negative emissions thereafter. The goal is an addition to the existing statewide targets of reducing the State's GHG emissions. CARB intends to work with relevant State agencies to ensure that future scoping plan updates identify and recommend measures to achieve the carbon neutrality goal.

Mobile Sources

The following regulations relate to the control of GHG emissions from mobile sources. Mobile sources include both on-road vehicles and off-road equipment.

AB 1493

AB 1493 (Pavley) (July 2002) was enacted in response to the transportation sector accounting for more than half of California's CO₂ emissions. AB 1493 required CARB to set GHG emission standards for passenger vehicles, light-duty trucks, and other vehicles determined by the State board to be vehicles that are primarily used for non-commercial personal transportation in the State. The bill required that CARB set GHG emission standards for motor vehicles manufactured in 2009 and all subsequent model years. CARB adopted the standards in September 2004. When fully phased in, the near-term (2009–2012) standards would result in a reduction of approximately 22 percent of GHG emissions compared to the emissions from the 2002 fleet, and the mid-term (2013–2016) standards would result in a reduction of approximately 30 percent. In December 2021, the Part Two Rule was adopted to revise the existing national GHG emission standards for passenger cars and light trucks through model year 2026. The standards are the most stringent vehicle emissions standards ever established for the light-duty vehicle sector.¹⁹

SB 375

SB 375 (Steinberg) (September 2008) addresses GHG emissions associated with the transportation sector through regional transportation and sustainability plans. SB 375 requires CARB to adopt regional GHG reduction targets for the automobile and light-truck sector for 2020 and 2035, and to update those targets every eight years. SB 375 requires the State's 18 regional metropolitan planning organizations to prepare a sustainable communities strategy as part of their Regional Transportation Plans that will achieve the GHG reduction targets set by CARB. If a metropolitan planning organization is unable to devise a sustainable communities strategy to achieve the GHG reduction target, the metropolitan planning organization must prepare an alternative planning strategy demonstrating how the GHG reduction target would be achieved through alternative development patterns, infrastructure, or additional transportation measures or policies.

¹⁹ U.S. Environmental Protection Agency. *Final Rule to Revise Existing National GHG Emissions Standards for Passenger Cars and Light Trucks Through Model Year 2026*. Available at: <https://www.epa.gov/regulations-emissions-vehicles-and-engines/final-rule-revise-existing-national-ghg-emissions>. Accessed March 2022.



Pursuant to California Government Code Section 65080(b)(2)(K), a sustainable communities strategy does not (1) regulate the use of land, (2) supersede the land use authority of cities and counties, or (3) require that a city's or county's land use policies and regulations, including those in a general plan, be consistent with the sustainable community strategy. Nonetheless, SB 375 makes regional and local planning agencies responsible for developing those strategies as part of the federally required metropolitan transportation planning process and the State-mandated housing element process.

Advanced Clean Cars Program and Zero-Emissions Vehicle Program

The Advanced Clean Cars program (January 2012) is an emissions-control program for model years 2015 through 2025. The program combines the control of smog- and soot-causing pollutants and GHG emissions into a single coordinated package. The package includes elements to reduce smog-forming pollution, reduce GHG emissions, promote clean cars, and provide the fuels for clean cars. To improve air quality, CARB has implemented new emission standards to reduce smog-forming emissions beginning with 2015 model year vehicles. By 2025, implementation of the rule is anticipated to reduce emissions of smog-forming pollution from cars by 75 percent compared to the average new car sold in 2015. To reduce GHG emissions, CARB, in conjunction with the USEPA and NHTSA, adopted GHG standards for model year 2017 to 2025 vehicles; the standards were estimated to reduce GHG emissions by 34 percent by 2025. The zero-emissions vehicle program acts as the focused technology of the Advanced Clean Cars program by requiring manufacturers to produce increasing numbers of zero-emissions vehicles and plug-in hybrid electric vehicles in the 2018 to 2025 model years. However, implementation of the Advanced Clean Cars program is contingent upon the outcome of the ongoing SAFE Vehicles Rule litigation.

EO B-16-12

EO B-16-12 (March 2012) required that State entities under the governor's direction and control support and facilitate the rapid commercialization of zero-emissions vehicles. The order directed CARB, California Energy Commission (CEC), California Public Utilities Commission (CPUC), and other relevant agencies to work with the Plug-In Electric Vehicle Collaborative and the California Fuel Cell Partnership to establish benchmarks to help achieve goals by 2015, 2020, and 2025. On a statewide basis, EO B-16-12 established a target reduction of GHG emissions from the transportation sector equaling 80 percent less than 1990 levels by 2050. EO B-16-12 did not apply to vehicles that have special performance requirements necessary for the protection of the public safety and welfare.

AB 1236

AB 1236 (October 2015) (Chiu) required a city, county, or city and county to approve an application for the installation of electric-vehicle charging stations, as defined, through the issuance of specified permits unless the city or county makes specified written findings based on substantial evidence in the record that the proposed installation would have a specific, adverse impact upon the public health or safety, and a feasible method to satisfactorily mitigate or avoid the specific, adverse impact does not exist. The bill provided for appeal of that decision to the planning commission, as specified. AB 1236 required electric-vehicle charging stations to meet specified standards. The bill required a city, county, or city and county with a population of 200,000 or more residents to adopt an ordinance, by September 30, 2016, that created an expedited and streamlined permitting process for electric-vehicle charging stations. The bill also required a city, county, or city and county with a population of less than 200,000 residents to adopt the ordinance by September 30, 2017.



Water

The following regulations relate to the conservation of water, which reduces GHG emissions related to electricity demands from the treatment and transportation of water.

EO B-29-15

In response to a drought in California, EO B-29-15 (April 2015) set a goal of achieving a statewide reduction in potable urban water usage of 25 percent relative to water use in 2013. The term of the EO extended through February 28, 2016, although many of the directives subsequently became permanent water-efficiency standards and requirements. The EO includes specific directives that set strict limits on water usage in the State. In response to EO B-29-15, the California Department of Water Resources modified and adopted a revised version of the Model Water Efficient Landscape Ordinance (MWELO) that, among other changes, significantly increases the requirements for landscape water use efficiency, and broadens the applicability of the ordinance to include new development projects with smaller landscape areas.

Solid Waste

The following regulations relate to the generation of solid waste and means to reduce GHG emissions from solid waste produced within the State.

AB 939 and AB 341

In 1989, AB 939, known as the Integrated Waste Management Act (Public Resources Code [PRC] Sections 40000 et seq.), was passed because of the observed increase in waste stream and the decrease in landfill capacity. The statute established the California Integrated Waste Management Board, which oversees a disposal reporting system. AB 939 mandated a reduction of waste being disposed where jurisdictions were required to meet diversion goals of all solid waste through source reduction, recycling, and composting activities of 25 percent by 1995 and 50 percent by 2000.

AB 341 (Chapter 476, Statutes of 2011 [Chesbro]) amended the California Integrated Waste Management Act of 1989 to include a provision declaring that the policy goal of the State is that not less than 75 percent of solid waste generated be source-reduced, recycled, or composted by 2020, and annually thereafter. In addition, AB 341 required the California Department of Resources Recycling and Recovery to develop strategies to achieve the State's policy goal.

Other State Actions

The following State regulations are broadly related to GHG emissions.

SB 97

SB 97 (Dutton) (August 2007) directed the Governor's Office of Planning and Research to develop guidelines under CEQA for the mitigation of GHG emissions. In 2008, the Governor's Office of Planning and Research issued a technical advisory as interim guidance regarding the analysis of GHG emissions in CEQA documents. The advisory indicated that the lead agency should identify and estimate a project's GHG emissions, including those associated with vehicular traffic, energy consumption, water usage, and construction activities. The advisory further recommended that the lead agency determine the significance of the impacts and impose all mitigation measures necessary to reduce GHG emissions to a level that is less than significant. The California Natural Resource Agency (CRNA) adopted the CEQA Guidelines amendments in December 2009, and the amended CEQA Guidelines became effective in March 2010.



Under the amended CEQA Guidelines, a lead agency has the discretion to determine whether to use a quantitative or qualitative analysis, or apply performance standards to determine the significance of GHG emissions resulting from a particular project (14 CCR 15064.4[a]). The CEQA Guidelines require a lead agency to consider the extent to which the project complies with regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of GHG emissions (14 CCR 15064.4[b]). The CEQA Guidelines also allow a lead agency to consider feasible means of mitigating the significant effects of GHG emissions, including reductions in emissions through the implementation of project features or off-site measures. The adopted amendments do not establish a GHG emission threshold, instead allowing a lead agency to develop, adopt, and apply the lead agency's own thresholds of significance or those developed by other agencies or experts. CNRA acknowledges that a lead agency may consider compliance with regulations or requirements implementing AB 32 in determining the significance of a project's GHG emissions.

With respect to GHG emissions, the CEQA Guidelines state that lead agencies should "make a good faith effort, to the extent possible on scientific and factual data, to describe, calculate or estimate" GHG emissions (14 CCR 15064.4[a]). The CEQA Guidelines note that an agency may identify emissions by either selecting a "model or methodology" to quantify the emissions or by relying on "qualitative analysis or other performance based standards" (14 CCR 15064.4[a]). Section 15064.4(b) states that the lead agency should consider the following when assessing the significance of impacts from GHG emissions on the environment: (1) the extent to which a project may increase or reduce GHG emissions as compared to the existing environmental setting; (2) whether the project emissions exceed a threshold of significance that the lead agency determines applies to the project; and (3) the extent to which the project complies with regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of GHG emissions (14 CCR 15064.4[b]).

EO S-13-08

EO S-13-08 (November 2008) is intended to hasten California's response to the impacts of global climate change, particularly sea-level rise. Therefore, the EO directs State agencies to take specified actions to assess and plan for such impacts. The final 2009 California Climate Adaptation Strategy report was issued in December 2009, and an update, *Safeguarding California: Reducing Climate Risk*, followed in July 2014. To assess the State's vulnerability, the report summarizes key climate change impacts to the State for the following areas: agriculture, biodiversity and habitat, emergency management, energy, forestry, ocean and coastal ecosystems and resources, public health, transportation, and water. Issuance of the *Safeguarding California: Implementation Action Plans* followed in March 2016. In January 2018, the CNRA released the *Safeguarding California Plan: 2018 Update*, which communicates current and needed actions that the State government should take to build climate change resiliency.

State Regulations Related to Energy

The State has adopted various pieces of regulation aimed at reducing energy consumption, increasing energy efficiency, and mandating sourcing requirements for electricity production.

Building Energy

The following regulations relate to energy efficiency and energy use reductions in the built environment.



Title 24, Part 6

Title 24 of the CCR was established in 1978 and serves to enhance and regulate California's building standards. While not initially promulgated to reduce GHG emissions, Part 6 of Title 24 specifically established Building Energy Efficiency Standards that are designed to ensure new and existing buildings in California achieve energy efficiency and preserve outdoor and indoor environmental quality. These energy efficiency standards are reviewed periodically, and revised if necessary, by the Building Standards Commission and CEC (PRC Section 25402[b][1]). The regulations receive input from members of industry, as well as the public, with the goal of "reducing of wasteful, uneconomic, inefficient, or unnecessary consumption of energy" (PRC Section 25402). The regulations are scrutinized and analyzed for technological and economic feasibility (PRC Section 25402[d]) and cost effectiveness (PRC Sections 25402[b][2] and [b][3]). As a result, the standards save energy, increase electricity supply reliability, increase indoor comfort, avoid the need to construct new power plants, and help preserve the environment.

The 2019 Title 24 standards are the currently applicable building energy efficiency standards and became effective on January 1, 2020. The 2019 Title 24 Building Energy Efficiency Standards reduced energy used and associated GHG emissions compared to the previous 2016 Title 24 standards. In general, single-family residences built to the 2019 standards are anticipated to use approximately seven percent less energy due to energy efficiency measures than those built to the 2016 standards; once rooftop solar electricity generation is factored in, single-family residences built under the 2019 standards use approximately 53 percent less energy than those under the 2016 standards. Nonresidential buildings built to the 2019 standards use an estimated 30 percent less energy than those built to the 2016 standards.

Title 24, Part 11

In addition to the CEC's efforts, in 2008, the California Building Standards Commission adopted the nation's first green building standards. The California Green Building Standards Code (Part 11 of Title 24) is commonly referred to as CALGreen, and establishes minimum mandatory standards and voluntary standards pertaining to the planning and design of sustainable site development, energy efficiency (in excess of the California Energy Code requirements), water conservation, material conservation, and interior air quality. The CALGreen standards took effect in January 2011 and instituted mandatory minimum environmental performance standards for all ground-up, new construction of commercial, low-rise residential and State-owned buildings and schools and hospitals. The original CALGreen standards have been updated several times. The CALGreen 2019 standards, which are the current standards, improved upon the 2016 CALGreen standards, and went into effect on January 1, 2020. The mandatory standards require the following:

- Mandatory reduction in indoor water use through compliance with specified flow rates for plumbing fixtures and fittings;
- Mandatory reduction in outdoor water use through compliance with a local water efficient landscaping ordinance or the California Department of Water Resources' MWEL0;
- 65 percent of construction and demolition waste must be diverted from landfills;
- Mandatory inspections of energy systems to ensure optimal working efficiency;
- Inclusion of electric vehicle charging stations or designated spaces capable of supporting future charging stations; and
- Low-pollutant-emitting exterior and interior finish materials, such as paints, carpets, vinyl flooring, and particle boards.



The CALGreen standards also include voluntary efficiency measures that are provided at two tiers and implemented at the discretion of local agencies and applicants. CALGreen's Tier 1 standards call for a 15 percent improvement in energy requirements, stricter water conservation, 65 percent diversion of construction and demolition waste, 10 percent recycled content in building materials, 20 percent permeable paving, 20 percent cement reduction, and cool/solar-reflective roofs. CALGreen's more rigorous Tier 2 standards call for a 30 percent improvement in energy requirements, stricter water conservation, 80 percent diversion of construction and demolition waste, 15 percent recycled content in building materials, 30 percent permeable paving, 25 percent cement reduction, and cool/solar-reflective roofs.

Title 20

Title 20 of the CCR requires manufacturers of appliances to meet State and federal standards for energy and water efficiency. The CEC certifies an appliance based on a manufacturer's demonstration that the appliance meets the standards. New appliances regulated under Title 20 include refrigerators, refrigerator-freezers, and freezers; room air conditioners and room air-conditioning heat pumps; central air conditioners; spot air conditioners; vented gas space heaters; gas pool heaters; plumbing fittings and plumbing fixtures; fluorescent lamp ballasts; lamps; emergency lighting; traffic signal modules; dishwaters; clothes washers and dryers; cooking products; electric motors; low-voltage dry-type distribution transformers; power supplies; televisions and consumer audio and video equipment; and battery charger systems. Title 20 presents protocols for testing each type of appliance covered under the regulations, and appliances must meet the standards for energy performance, energy design, water performance, and water design. Title 20 contains three types of standards for appliances: federal and State standards for federally regulated appliances, State standards for federally regulated appliances, and State standards for non-federally regulated appliances.

SB 1

SB 1 (Murray) (August 2006) established a \$3 billion rebate program to support the goal of the State to install rooftop solar energy systems with a generation capacity of 3,000 megawatts (MW) through 2016. SB 1 added sections to the California PRC, including Chapter 8.8 (California Solar Initiative), that require building projects applying for ratepayer-funded incentives for photovoltaic systems to meet minimum energy efficiency levels and performance requirements. Section 25780 established that it is a goal of the State to establish a self-sufficient solar industry. The goals included establishing solar energy systems as a viable mainstream option for homes and businesses within 10 years of adoption, and placing solar energy systems on 50 percent of new homes within 13 years of adoption. SB 1, also termed "Go Solar California," was previously titled "Million Solar Roofs."

AB 1470

AB 1470 established the Solar Water Heating and Efficiency Act of 2007. The bill made findings and declarations of the Legislature relating to the promotion of solar water heating systems and other technologies that reduce natural gas demand. AB 1470 required the CEC to evaluate the data available from a specified pilot program, and, if the CEC made a specified determination, to design and implement a program of incentives for the installation of 200,000 solar water heating systems in homes and businesses throughout the State by 2017.



AB 1109

Enacted in 2007, AB 1109 required the CEC to adopt minimum energy efficiency standards for general-purpose lighting to reduce electricity consumption by 50 percent for indoor residential lighting and by 25 percent for indoor commercial lighting.

Renewable Energy and Energy Procurement

The CEC is the State's primary energy policy and planning agency. Created by the Legislature in 1974, the CEC has seven major responsibilities: forecasting future energy needs; promoting energy efficiency and conservation by setting the State's appliance and building energy efficiency standards; supporting energy research that advances energy science and technology through research, development, and demonstration projects; developing renewable energy resources; advancing alternative and renewable transportation fuels and technologies; certifying thermal power plants 50 MW and larger; and planning for and directing State response to energy emergencies.²⁰ The CPUC regulates privately owned electric, natural gas, telecommunications, water, railroad, rail transit, and passenger transportation companies. The CPUC is responsible for ensuring that customers have safe, reliable utility service and infrastructure at reasonable rates, regulating utility services, stimulating innovation, and promoting competitive markets.²¹ The following regulations relate to the source of electricity provided to consumers within the State, as well as standards related to the generation of electricity within the State.

Renewable Portfolio Standard (RPS), SB 350, and SB 100

Established in 2002 under SB 1078, accelerated in 2006 under SB 107, and expanded in 2011 under SB 2, California's RPS is one of the most ambitious renewable energy standards in the country. The RPS program requires investor-owned utilities, electric service providers, and community choice aggregators to increase procurement from eligible renewable energy resources to 33 percent of total procurement by 2020.

Since the inception of the RPS program, the program has been extended and enhanced multiple times. In 2015, SB 350 extended the State's RPS program by requiring that publicly owned utilities procure 50 percent of their electricity from renewable energy sources by 2030. The requirements of SB 350 were expanded and intensified in 2018 through the adoption of SB 100, which mandated that all electricity generated within the State by publicly owned utilities be generated through carbon-free sources by 2045. In addition, SB 100 increased the previous renewable energy requirement for the year 2030 by 10 percent; thus, requiring that 60 percent of electricity generated by publicly owned utilities originate from renewable sources by the year 2030.

Local Regulations

The most prominent local regulations related to air quality, GHG emissions, and energy are established by the SJVAPCD, the City of Manteca General Plan, and the City of Manteca CAP are discussed in further detail below.

San Joaquin Valley Air Pollution Control District

The SJVAPCD was formed to administer local, State, and federal air quality management programs for San Joaquin, Stanislaus, Merced, Madera, Fresno, Kings, and Tulare Counties, and

²⁰ California Energy Commission. *About the California Energy Commission*. Available at: <http://www.energy.ca.gov/commission/index.html>. Accessed March 2022.

²¹ California Public Utilities Commission. *About the California Public Utilities Commission (CPUC)*. Available at: <https://www.cpuc.ca.gov/about-cpuc/cpuc-overview/about-us>. Accessed March 2022.



the Valley portion of Kern County. The SJVAPCD monitors, evaluates, and implements control measures for enforcing air quality and GHG standards and regulations and reducing emissions from motor vehicles. The SJVAPCD is tasked with implementing certain programs and regulations required by the federal CAA and the CCAA.

To assist lead agencies, project proponents, permit applicants, and interested parties in assessing and reducing the impacts of project-specific air quality and GHG emissions, the SJVAPCD has prepared a number of guidelines, including the Environmental Review Guidelines Procedures for Implementing the California Environmental Quality Act,²² and the Guide for Assessing and Mitigating Air Quality Impacts.²³ As set forth in the SJVAPCD guidelines, the SJVAPCD has adopted thresholds of significance for criteria pollutant emissions.

In August 2008, the SJVAPCD adopted the *Climate Change Action Plan* (CCAP). The CCAP directed the District Air Pollution Control Officer to develop guidance to assist lead agencies, project proponents, permit applicants, and interested parties in assessing and reducing the impacts of project-specific GHG emissions on global climate change. Accordingly, on December 17, 2009, the SJVAPCD adopted the Guidance for Valley Land-use Agencies in Addressing GHG Emission Impacts for New Projects under CEQA²⁴ and the District Policy Addressing GHG Emission Impacts for Stationary Source Projects Under CEQA When Serving as the Lead Agency.²⁵ The guidance and policy rely on the use of performance based standards, otherwise known as Best Performance Standards (BPS), to assess significance of project-specific GHG emissions on global climate change during the environmental review process, as required by CEQA.

Use of BPS is a method of streamlining the CEQA process of determining significance and is not a required emission reduction measure. Projects implementing BPS would be determined to have a less-than-cumulatively-significant impact. Otherwise, demonstration that a project's emissions would be reduced or mitigated consistent with AB 32 would be required in order to determine that a project would have a less-than-cumulatively-significant impact. It should be noted that the guidance does not limit a lead agency's authority in establishing its own process and guidance for determining significance of project-related impacts on global climate change.

Attainment Plans

Due to the nonattainment designations, the SJVAPCD has developed plans to attain the State and federal standards for ozone and particulate matter. The air quality plans include emissions inventories to measure the sources of air pollutants, to evaluate how well different control measures have worked, and show how air pollution will be reduced. In addition, the plans include the estimated future levels of pollution to ensure that the area will meet air quality goals. Each of the attainment plans currently in effect are discussed in further detail below.

²² San Joaquin Valley Air Pollution Control District. *Environmental Review Guidelines Procedures for Implementing the California Environmental Quality Act*. August 2000.

²³ San Joaquin Valley Air Pollution Control District. *Guide for Assessing and Mitigating Air Quality Impacts*. Revised January 10, 2002.

²⁴ San Joaquin Valley Air Pollution Control District. *Guidance for Valley Land-use Agencies in Addressing GHG Emission Impacts for New Projects under CEQA*. December 17, 2009.

²⁵ San Joaquin Valley Air Pollution Control District. *District Policy Addressing GHG Emission Impacts for Stationary Source Projects Under CEQA When Serving as the Lead Agency*. December 17, 2009.



The most recent State ozone plan is the 2017 Clean Air Plan, adopted on April 19, 2017.²⁶ The 2017 Clean Air Plan was developed as a multi-pollutant plan that provides an integrated control strategy to reduce ozone, PM, TACs, and GHGs. The control strategies included in the 2017 Clean Air Plan serve as the backbone of the 2017 Clean Air Plan, and build upon existing regional, state, and national programs for emissions reductions.

1-Hour Ozone Plan

Effective June 15, 2005, the USEPA revoked the 1-hour ozone NAAQS, finding that the 8-hour ozone standard was more health protective. Nonetheless, the area must still attain the revoked NAAQS before the CAA Section 185 fees collected under Rule 3170 can be rescinded. Thus, the SJVAPCD has developed a new plan for USEPA's revoked 1-hour ozone standard. The SJVAPCD's *2013 Plan for the Revoked 1-Hour Ozone Standard* was approved on September 19, 2013. The modeling included in the plan confirms that the SJVAB will attain the revoked 1-hour ozone standard by 2017.

8-Hour Ozone Plan

The SJVAPCD adopted the *2016 Plan for the 2008 8-Hour Ozone Standard* in June 2016, which addresses the Clean Air Act requirements and ensures attainment of the 75 ppb 8-hour ozone standard. The deadline for the SJVAB to attain the 2008 8-hour ozone standard is December 31, 2031.

PM₁₀ Plan

Based on PM₁₀ measurements taken from 2003 to 2006, the USEPA found that the SJVAB has reached federal PM₁₀ standards. On September 21, 2007, the SJVAPCD adopted the *2007 PM₁₀ Maintenance Plan and Request for Redesignation*, which demonstrates that the SJVAB will continue to meet the PM₁₀ standard. USEPA approved the document, and on September 25, 2008, the SJVAB was redesignated to attainment.

PM_{2.5} Plans

The SJVAPCD adopted the *2008 PM_{2.5} Plan* on April 30, 2008, which includes control measures to reduce directly produced PM_{2.5} in order to meet the USEPA's annual PM_{2.5} standard established in 1997. The plan estimates that the SJVAB will reach the PM_{2.5} standard by 2015. The CARB approved the *2008 PM_{2.5} Plan* on May 22, 2008, and the USEPA approved most provisions of the *2008 PM_{2.5} Plan* effective January 9, 2012. In addition, the SJVAPCD adopted the *2012 PM_{2.5} Plan* in December 2012, which addresses the USEPA's 24-hour PM_{2.5} standard established in 2006.

Rules and Regulations

All projects under the jurisdiction of the SJVAPCD are required to comply with all applicable SJVAPCD rules and regulations. The SJVAPCD's regulations and rules include, but are not limited to, the following:

Regulation II (Permits)

Regulation II (Permits) deals with permitting emission sources and includes rules such as permit requirements (Rule 2010), New and Modified Stationary Source Review (Rule 2201), and implementation of Emission Reduction Credit Banking (Rule 2301). District Regulation II ensures

²⁶ *Ibid.*



that stationary source emissions will be reduced or mitigated to below the District's significance thresholds.

Regulation IV (Prohibitions)

District Regulation IV (Prohibitions) is comprised of prohibitory rules that are written to achieve emission reductions from specific source categories or from all sources. The rules are applicable to existing sources (retrofit requirements) as well as new sources. Examples of prohibitory rules would be Rule 4901 (Wood burning Fireplaces and Wood Burning Heaters), Rule 4102 (Nuisance), Rule 4601 (Architectural Coatings), Rule 4641 (Cutback, Slow Cure, and Emulsified Asphalt, Paving and Maintenance Operations), and Rule 4663 (Organic Solvent Cleaning, Storage, and Disposal).

Regulation VIII (Fugitive PM₁₀ Prohibition)

The purpose of Regulation VIII is to reduce ambient concentrations of PM₁₀ by requiring actions to prevent, reduce, or mitigate anthropogenic fugitive dust emissions. Regulation VIII requires property owners, contractors, developers, equipment operators, farmers and public agencies to control fugitive dust emissions from specified outdoor fugitive dust sources, including the following: construction sites; excavation and earthmoving; bulk material handling, storage and transport; vacant land; paved and unpaved roads; and unpaved vehicle traffic areas. Regulation VIII specifies the following measures to control fugitive dust:

- Apply water to unpaved surfaces and areas;
- Use non-toxic chemical or organic dust suppressants on unpaved roads and traffic areas;
- Limit or reduce vehicle speed on unpaved roads and traffic areas;
- Maintain areas in a stabilized condition by restricting vehicle access;
- Install wind barriers;
- During high winds, cease outdoor activities that disturb the soil;
- Keep bulk materials sufficiently wet when handling;
- Store and handle materials in a three-sided structure;
- When storing bulk materials, apply water to the surface or cover the storage pile with a tarp;
- Don't overload haul trucks. Overloaded trucks are likely to spill bulk materials;
- Cover haul trucks with a tarp or other suitable cover. Or, wet the top of the load enough to limit visible dust emissions;
- Clean the interior of cargo compartments on emptied haul trucks prior to leaving a site;
- Prevent trackout by installing a trackout control device;
- Clean up trackout at least once a day. If along a busy road or highway, clean up trackout immediately; and
- Monitor dust-generating activities and implement appropriate measures for maximum dust control.

For projects in which construction-related activities would disturb equal to or greater than one acre of surface area, the SJVAPCD recommends that demonstration of receipt of a District-approved Dust Control Plan or Construction Notification form, prior to issuance of the first grading permit, be made a condition of project approval.



It should be noted that although compliance with Regulation VIII substantially reduces project-specific fugitive dust emissions, the regulation alone may not be sufficient to reduce project-specific emissions to less-than-significant levels.

Rule 9510 (Indirect Source Review)

Rule 9510 (Indirect Source Review [ISR]) is intended to reduce a project's impact on air quality through project design elements or mitigation by payments of applicable off-site mitigation fees. The ISR rule, which went into effect March 1, 2006, requires developers of larger residential, commercial, and industrial projects to reduce smog-forming and particulate emissions generated by their projects. The ISR rule seeks to reduce the growth in NO_x and PM₁₀ emissions associated with construction and operation of new development projects in the San Joaquin Valley. The ISR rule requires developers to reduce construction exhaust NO_x and PM₁₀ emissions by 20 percent and 45 percent, respectively, and reduce operational emissions of NO_x and PM₁₀ emissions by 33.3 percent and 50 percent, respectively, as compared to the unmitigated baseline. Developers can achieve the required reductions through any combination of SJVAPCD-approved on-site emission reduction measures. When a developer cannot achieve the required reductions through on-site measures, off-site mitigation fees are imposed to mitigate the difference between the required emission reductions and the mitigations achieved on-site. Monies collected from the fee are used by the SJVAPCD to fund emission reduction projects in the San Joaquin Valley on behalf of the project.

Individual development projects would be subject to ISR requirements if upon full buildout the project would include or exceed the size limits specified by the SJVAPCD. For a residential development, the size limit is 50 dwelling units. For projects subject to Rule 9510, the SJVAPCD recommends that demonstration of compliance with the rule, including payment of all applicable fees before issuance of the first building permit, be made a condition of project approval.

It should be noted that although compliance with Rule 9510 substantially reduces project specific impacts on air quality, the rule alone may not be sufficient to reduce project-specific emissions to less-than-significant levels.

City of Manteca General Plan

The following goals and policies related to air quality, GHG emissions, and energy are from the City of Manteca General Plan:

Air Quality Element

Goal AQ-1 Improve air quality by:

- Achieving and maintaining ambient air quality standards established by the U.S. Environmental Protection Agency, the California Air Resources Board, and the San Joaquin Air Pollution Control District;
- Minimizing public exposure to toxic or hazardous air pollutants; and
- Minimizing public exposure to pollutants that create a public nuisance, such as unpleasant odors.

Goal AQ-4 Reduce air emissions through energy conservation.



- Policy AQ-P-2 Develop a land use plan that will help to reduce the need for trips and will facilitate the common use of public transportation, walking, bicycles, and alternative fuel vehicles.
- Policy AQ-P-3 Segregate and provide buffers between land uses that typically generate hazardous or obnoxious fumes and residential or other sensitive land uses.
- Policy AQ-P-4: Develop and maintain street systems that provide for efficient traffic flow and thereby minimize air pollution from automobile emissions.
- Policy AQ-P-5 Develop and maintain circulation systems that provide alternatives to the automobile for transportation, including bicycles routes, pedestrian paths, bus transit, and carpooling.
- Policy AQ-P-6: Coordinate public transportation networks, including trains, local bus service, regional bus service and rideshare facilities to provide efficient public transit service.
- Policy AQ-P-7 New construction will be managed to minimize fugitive dust and construction vehicle emissions.
- Policy AQ-P-8 Woodburning devices shall meet current standards for controlling particulate air pollution.
- Policy AQ-P-9: Burning of any combustible material within the City will be controlled to minimize particulate air pollution.
- Policy AQ-P-10 Encourage energy efficient building designs.

Community Design Element

Goal CD-9 Establish a durable sustainable community that utilizes resources efficiently.

- Policy CD-P-32: New buildings shall be designed to be responsive to the local climate in a manner that provides shelter from sun and rain for pedestrians.
- Policy CD-P-33 Passive solar design features are encouraged whenever possible. Design of buildings should consider energy-efficient concepts such as natural heating and/or cooling, sun and wind exposure and orientation, and other solar energy opportunities.
- Policy CD-P-34: Solar collectors, if used, shall be oriented away from public view or designed as an integral element of the roof structure.
- Policy CD-P-35: Architectural elements that contribute to a building's character, aid in climate control, and enhance pedestrian scale are encouraged. Examples include canopies, roof overhangs,



projections or recessions of stories, balconies, reveals, and awnings.

Policy CD-P-36: Encourage the creation of an urban forest comprised of street trees, residential lot trees, and trees in non-residential parking lots and other public open space.

Goal CD-10 Establish a pedestrian and bicycle friendly environment in neighborhoods and commercial and office land use areas.

Circulation Element

Goal C-2 Provide complete streets designed to serve a broad spectrum of travel modes, including automobiles, public transit, walking, and bicycling.

Goal C-11 Maintain a coordinated, efficient bus service that provides both an effective alternative to private automobile use and serves members of the community that cannot drive.

Policy C-P-33 Bicycle travel through residential streets shall be facilitated as much as possible without the use of Class II bike lanes. In general, residential streets have sufficiently low volumes as to not require bike lanes and the narrower street cross section will assist in calming traffic.

Resource Conservation Element

Goal RC-4 Encourage private development to explore and apply non-traditional energy sources such as co-generation, wind, and solar to reduce dependence on traditional energy sources.

Goal RC-5 Promote energy efficiency in new development and in building design.

Policy RC-P-6 Comply with construction and design standards that promote energy conservation.

Policy RC-P-9 The City shall support use of alternative energy sources in new commercial, industrial and residential development.

City of Manteca Climate Action Plan

In 2013, the City of Manteca prepared and adopted a qualified CAP as the primary strategy for ensuring that the buildout of the Manteca General Plan supports the goals of AB 32. The CAP is designed to reduce community-related and City operations-related GHG emissions to a degree that would not hinder or delay implementation of AB 32. Achieving the State target of reducing emissions to 1990 levels by 2020 would require a reduction in emissions of 21.7 percent. Applying the 21.7 percent reduction to the City's overall 2020 business as usual (BAU) emissions would result in a target reduction for the City of 429,693 MTCO₂e per year or 4.91 MTCO₂e per person per year. In order to meet the target reduction, the City has developed a variety of reduction strategies. For new development projects constructed in the City of Manteca, the CAP requires development projects to achieve GHG emissions reductions by taking the following actions:



- Comply with the applicable land use, sustainable development, and resource conservation policies of the Manteca General Plan.
- Construct project transportation infrastructure that supports walking, bicycling, and transit use.
- Implement transportation demand management programs in projects with large numbers of employees.
- Design and construct project buildings to exceed Title 24 Energy Efficiency Standards by at least 10 percent.
- Implement project buildings including water conservation measures that meet or exceed the California Green Building Code standards 20 percent requirement.
- Install project landscaping that meets or exceeds water conservation standards of the City's adopted landscaping ordinance 20 percent reduction requirement.
- Develop programs to exceed state recycling and diversion targets by at least 10 percent.

The strategies proposed in the CAP are expected to achieve local reductions that are adequate to meet the City's 2020 target. Cities with climate action plans that are consistent with the State and regional AB 32 and SB 375 reduction targets can use their climate action plan as the basis for determining if projects would result in significant climate change impacts under CEQA. The City of Manteca CAP contains the elements necessary to fulfill such a function. It is noted that the City of Manteca is currently preparing an update to the 2013 CAP; however, the updated CAP has not been adopted.

4.3.4 IMPACTS AND MITIGATION MEASURES

This section describes the standards of significance and methodology used to analyze and determine the proposed project's potential impacts related to air quality, GHG emissions, and energy. A discussion of the project's impacts, as well as mitigation measures where necessary, is also presented.

Standards of Significance

Based on the recommendations of the SJVAPCD, City of Manteca standards, and consistent with Appendix G of the CEQA Guidelines, the proposed project would result in a significant impact related to air quality, GHG emissions, or energy if the project would:

- Conflict with or obstruct implementation of the applicable air quality plan;
- Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in nonattainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors);
- Expose sensitive receptors to substantial pollutant concentrations (including localized CO concentrations and TAC emissions);
- Result in other emissions (such as those leading to odors) affecting a substantial number of people;
- Generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment;
- Conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of GHGs;



- Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation; or
- Conflict with or obstruct a State or local plan for renewable energy or energy efficiency.

The air quality and GHG emissions analysis in this EIR uses the thresholds for criteria pollutants, localized CO, TAC emissions, and GHG emissions as discussed below.

Criteria Pollutant Emissions

The SJVAPCD thresholds of significance for criteria pollutant emissions are presented in Table 4.3-6 and are expressed in units of tons per year (tons/yr). Pursuant to CEQA Guidelines Section 15064.4(b)(2), the lead agency is charged with determining a threshold of significance that is applicable to the project. For the analysis within this EIR, the City has elected to use the SJVAPCD's thresholds of significance. Therefore, if the proposed project's emissions exceed the SJVAPCD's pollutant thresholds presented in Table 4.3-6, the project could have a significant effect on air quality, the attainment of AAQS, and could conflict with or obstruct implementation of the applicable air quality plan or result in a cumulatively considerable net increase of a criteria pollutant for which the project region is under nonattainment.

Table 4.3-6		
SJVAPCD Criteria Pollutant Thresholds of Significance		
Pollutant	Construction Emissions (tons/yr)	Operational Emissions (tons/yr)
ROG	10	10
NO _x	10	10
CO	100	100
SO _x	27	27
PM ₁₀	15	15
PM _{2.5}	15	15
<i>Source: SJVAPCD, March 19, 2015.</i>		

The SJVAPCD does not maintain specific thresholds of significance for determining whether a project's impact would be cumulatively considerable; however, the guidance notes that if a project is significant based on the thresholds of significance for criteria pollutants, then it is also cumulatively significant.²⁷

Localized CO Emissions

In accordance with the State CO Protocol, the SJVAPCD has established preliminary screening criteria for determining whether the effect that a project would have on any given intersection would cause a potential CO hotspot. If either of the following is true for the proposed project, further CO analysis would be required:

- A traffic study for the project indicates that the Level of Service (LOS) on one or more streets or at one or more intersections in the project vicinity would be reduced to LOS E or F; or

²⁷ San Joaquin Valley Air Pollution Control District. *Guidance for Assessing and Mitigating Air Quality Impacts* [pg 109]. March 19, 2015.



- A traffic study indicates that the project would substantially worsen (i.e., increase delay by more than five percent) an already existing LOS F on one or more streets or at more or more intersections in the project vicinity.

However, following approval of SB 743, CEQA documents can no longer rely on LOS for determining significance conclusions. Because the SJVAPCD's current guidance for determining localized CO impacts relies only on LOS, and LOS cannot be used for determining significance conclusions, this analysis relies on the guidance of other air districts in the State. The Placer County Air Pollution Control District (PCAPCD) has a screening level for localized CO impacts.²⁸ According to the PCAPCD screening levels, a project could result in a significant impact if the project would result in CO emissions from vehicle operations in excess of 550 pounds per day (lbs/day).²⁹

TAC Emissions

The CARB provides advisory recommendations for siting sensitive receptors near land uses that are known to emit TACs. If a project would involve siting a new source of TACs or new sensitive receptors within the CARB's identified setback distances, then a potentially significant impact related to TAC emissions could occur. For example, the CARB recommends avoiding siting new sensitive land uses within 500 feet of a freeway, urban roads with 100,000 vehicles/day, or rural roads with 50,000 vehicles/day. If a project were to site new receptors within 500 feet of a freeway, additional analysis would be warranted.

According to the SJVAPCD, a significant impact related to TACs would occur if a new stationary source would cause any of the following:

- An increase in carcinogen risk levels of more than 10 persons in one million; or
- A non-cancer (chronic or acute) hazard index greater than 1.0.

The foregoing risk thresholds are intended for use in analyzing potential impacts related to the siting of a new stationary source of emissions, such as a manufacturing plant. The proposed project involves development of the project site for residential uses and are not anticipated to involve any substantial stationary sources of TACs. Thus, the thresholds presented above would not directly apply to construction or operations of the proposed uses. However, given the lack of other adopted thresholds for TAC emissions, the foregoing thresholds are applied to non-stationary sources as an industry standard approach to analysis, and are used herein for evaluating construction emissions.

GHG Emissions

The following discussions detail the thresholds of significance for assessing GHG emissions.

²⁸ It is noted that the Sacramento Metropolitan Air Quality Management District (SMAQMD) area is geographically closer to the SJVAPCD than the PCAPCD. The most recent SMAQMD guidance indicates that localized CO emissions are not an area of concern because the Sacramento Valley Air Basin has been in attainment for the pollutant for several years. As a result, the SMAQMD does not offer further guidance in evaluating the significance of CO emissions. Thus, in order to present a quantitative evaluation, the PCAPCD threshold of significance for localized CO emission is used herein.

²⁹ Placer County Air Pollution Control District. *2017 CEQA Handbook: Chapter 4, Analyzing Operations Criteria Pollutant Emissions*. 2017.



Annual GHG Emissions that Could Have a Significant Impact on the Environment

Neither the SJVAPCD nor the City of Manteca have adopted quantitative thresholds of significance for GHG emissions that would apply to the proposed project. CEQA allows lead agencies to identify thresholds of significance applicable to a project that are supported by substantial evidence. Substantial evidence is defined in the CEQA statute to mean “facts, reasonable assumptions predicated on facts, and expert opinion supported by facts” (14 CCR 15384[b]).³⁰ Substantial evidence can be in the form of technical studies, agency staff reports or opinions, expert opinions supported by facts, and prior CEQA assessments and planning documents. Therefore, in the absence of applicable quantitative GHG thresholds, and to establish additional context in which to consider the magnitude of the project’s GHG emissions, the lead agency has elected to rely on the South Coast Air Quality Management District’s (SCAQMD) per-year screening level threshold for the purposes of this analysis.

The SCAQMD is the air district responsible for regulating stationary sources of air pollution in the South Coast Air Basin and the Coachella Valley portion of the Salton Sea Air Basin in Southern California. The SCAQMD serves as a comparable air district to the SJVAPCD, as, similar to the SJVAPCD, the SCAQMD regulatory territory encompasses an area in which inland valley areas receive pollutants originating from coastal areas. As such, the air pollution pattern experiences in the SCAQMD from Greater Los Angeles and San Diego communities would be similar to those experienced by the SJVAPCD from Bay Area communities.

The SCAQMD formed a GHG CEQA Significance Threshold Working Group to work with SCAQMD staff on developing GHG CEQA significance thresholds until statewide significance thresholds or guidelines are established. In December 2008, the SCAQMD adopted an interim 10,000 MTCO₂e/year screening level threshold for stationary source/industrial projects for which the SCAQMD is the lead agency.³¹ From December 2008 to September 2010, SCAQMD hosted working group meetings and revised the draft threshold proposal several times, although it did not officially provide the proposals in a subsequent document. SCAQMD has continued to consider adoption of significance thresholds for residential and general land use development projects. The most recent proposal, issued in September 2010, used the following tiered approach to evaluate potential GHG impacts from various uses:

- Tier 1: Determine if CEQA categorical exemptions are applicable. If not, move to Tier 2.
- Tier 2: Consider whether or not the proposed project is consistent with a locally adopted GHG reduction plan that has gone through public hearing and CEQA review, that has an approved inventory, includes monitoring, etc. If not, move to Tier 3.
- Tier 3: Consider whether the project generates GHG emissions in excess of screening thresholds for individual land uses. The 10,000 MTCO₂e/yr threshold for industrial uses would be recommended for use by all lead agencies. Under option 1, separate screening

³⁰ 14 CCR 15384 provides the following discussion: “Substantial evidence” as used in the Guidelines is the same as the standard of review used by courts in reviewing agency decisions. Some cases suggest that a higher standard, the so called “fair argument standard” applies when a court is reviewing an agency’s decision whether or not to prepare an EIR. Public Resources Code section 21082.2 was amended in 1993 (Chapter 1131) to provide that substantial evidence shall include “facts, reasonable assumptions predicated upon facts, and expert opinion supported by facts.” The statute further provides that “argument, speculation, unsubstantiated opinion or narrative, evidence which is clearly inaccurate or erroneous, or evidence of social or economic impacts which do not contribute to, or are not caused by, physical impacts on the environment, is not substantial evidence.”

³¹ South Coast Air Quality Management District. *Board Letter – Interim CEQA GHG Significance Threshold for Stationary Sources, Rules and Plans*. December 5, 2008.



thresholds are proposed for residential projects (3,500 MTCO₂e/yr), commercial projects (1,400 MTCO₂e/yr), and mixed-use projects (3,000 MTCO₂e/yr). Under option 2, a single numerical screening threshold of 3,000 MTCO₂e/yr would be used for all non-industrial projects. If the project generates emissions in excess of the applicable screening threshold, move to Tier 4.

- **Tier 4:** Consider whether the project generates GHG emissions in excess of applicable performance standards for the project service population (population plus employment). The efficiency targets were established based on the goal of AB 32 to reduce statewide GHG emissions to 1990 levels by 2020. The 2020 efficiency targets are 4.8 MTCO₂e/yr per service population for project-level analyses and 6.6 MTCO₂e/yr per service population for plan-level analyses. If the project generates emissions in excess of the applicable efficiency targets, move to Tier 5.
- **Tier 5:** Consider the implementation of CEQA mitigation (including the purchase of GHG offsets) to reduce the project efficiency target to Tier 4 levels.

The foregoing thresholds were developed to be consistent with CEQA requirements for developing significance thresholds, are supported by substantial evidence, and provides guidance for determining whether GHG emissions from a proposed land use project are significant.

Consistency with City of Manteca Climate Action Plan

Pursuant to Section 15183.5 of the CEQA Guidelines, a project may satisfy applicable GHG analysis requirements under CEQA by demonstrating compliance with a qualified CAP. Specifically, Section 15183.5 states the following:

Lead agencies may analyze and mitigate the significant effects of greenhouse gas emissions at a programmatic level, such as in a general plan, a long range development plan, or a separate plan to reduce greenhouse gas emissions. Later Project-specific environmental documents may tier from and/or incorporate by reference that existing programmatic review. Project-specific environmental documents may rely on an EIR containing a programmatic analysis of greenhouse gas emissions as provided in section 15152 (tiering), 15167 (staged EIRs) 15168 (program EIRs), 15175-15179.5 (Master EIRs), 15182 (EIRs Prepared for Specific Plans), and 15183 (EIRs Prepared for General Plans, Community Plans, or Zoning).

On October 15, 2013, the City of Manteca adopted their CAP, which is intended to support the goals of AB 32. The CAP is designed to reduce community-related and City operations-related GHG emissions to a degree that would not hinder or delay implementation of AB 32. In order to do such, the City has outlined a course of action for the City government and the community of Manteca to reduce per capita GHG emissions. For new development projects constructed in the City of Manteca, the CAP requires the development projects to achieve GHG emissions reductions by implementing specific reduction strategies. The City of Manteca CAP is consistent with the goals presented in AB 32 and, therefore, projects considered consistent with the CAP and would be considered to not conflict with AB 32.

In addition to above, and to assess compliance with SB 32, the City has also determined that a qualitative analysis assessing the project's compliance with the CARB's 2017 Scoping Plan and the San Joaquin Council of Governments' (SJCOG's) 2018 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) is warranted. The CARB's 2017 Scoping Plan establishes a strategy to meet California's 2030 GHG targets; accordingly, should the project



be shown to comply with the 2017 Scoping Plan, the proposed project would be considered consistent with Statewide reduction targets for the year 2030. A project's compliance with the local actions contained in Appendix B of the 2017 Scoping Plan may be used to assess a project's compliance with the 2017 Scoping Plan. The SJCOG's 2018 RTP/SCS is intended to accommodate planned growth within the region while simultaneously achieving regional targets for reducing GHG emissions.³² Thus, consistency with the 2018 RTP/SCS would indicate that the project would not inhibit attainment of regional GHG emissions reductions goals, which have been established in compliance with statewide reduction targets.

By assessing compliance with the City's CAP, CARB's 2017 Scoping Plan, and the 2018 RTP/SCS, the City would comply with Section 15064.4(b)(3) of the CEQA Guidelines, which suggests that lead agencies consider the extent that the project would comply with regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction of GHG emissions.

Method of Analysis

The analysis protocol and guidance provided by the SJVAPCD, including pollutant thresholds of significance, was used to analyze the proposed project's air quality impacts.

Construction and Operational Criteria Pollutant and GHG Emissions

A comparison of project-related emissions to the thresholds discussed above shall determine the significance of the potential impacts to air quality and climate change resulting from the proposed project. The proposed project's short-term construction, long-term operational, and GHG emissions were estimated using the CalEEMod version 2020.4.0 software, which is a statewide model designed to provide a uniform platform for government agencies, land use planners, and environmental professionals to quantify air quality emissions from land use projects. The model applies inherent default values for various land uses, including trip generation rates based on the ITE Manual, vehicle mix, trip length, average speed, etc. However, where project-specific data was available, such data was input into the model. The following inherent project design features and project-specific information were included in the model:

- Construction would begin in May of 2022;³³
- Construction would occur over approximately 14 years;
- Trip generation rates and trip lengths were adjusted based on the information included in the Transportation Impact Assessment prepared by Fehr & Peers for the proposed project;
- The project would improve pedestrian network connectivity by providing on-site sidewalks that would connect to existing sidewalks in the vicinity; and
- The project would comply with all applicable regulations, including the 2019 California Building Standards Code (CBSC), the MWELO, AB 1346 relating to electric landscaping equipment, and SJVAPCD Rule 4663 relating to low-volatile organic compound (VOC) cleaning supplies.

³² San Joaquin Council of Governments. *2018 Regional Transportation Plan Sustainable Communities Strategy*. Adopted June 2018.

³³ It is noted that when the air quality analysis was conducted, project construction was anticipated to commence in May 2022. While this is no longer the case, the analysis conducted for this EIR is conservative because construction fleets and electricity generation are becoming more efficient over time due to State regulations; thus, modeling construction at an earlier start date provides a more conservative analysis.



The results of emissions estimations were compared to the standards of significance discussed above in order to determine the associated level of impact. Results of the modeling are expressed in tons/yr for criteria air pollutant emissions, which allows for comparison between the model results and the thresholds of significance. All CalEEMod modeling results are included in Appendix C to this EIR.

Construction Health Risk Assessment

To analyze potential health risks to nearby receptors that could result from DPM emissions from off-road equipment at the project site, total DPM emissions from construction of the proposed project were estimated. DPM is considered a subset of PM_{2.5}, thus, the CalEEMod estimated PM_{2.5} emissions from exhaust during construction was conservatively assumed to represent all DPM emitted on-site. The CalEEMod estimated PM_{2.5} exhaust emissions were then used to calculate the concentration of DPM at the maximally exposed sensitive receptor near the project site.

DPM concentrations resulting from project implementation were estimated using the American Meteorological Society/Environmental Protection Agency (AMS/EPA) Regulatory Model (AERMOD). The associated cancer risk and non-cancer hazard index were calculated using the CARB's Hotspot Analysis Reporting Program Version 2 (HARP 2) Risk Assessment Standalone Tool (RAST), which calculates the cancer and non-cancer health impacts using the risk assessment guidelines of the 2015 Office of Environmental Health Hazard Assessment (OEHHA) Guidance Manual for Preparation of Health Risk Assessments.³⁴ The exposure period was set to 14 years. The modeling was performed in accordance with the USEPA's User's Guide for the AERMOD³⁵ and the 2015 OEHHA Guidance Manual. All AERMOD and HARP modeling results are included in Appendix C to this EIR.

Although pollutant concentrations at all nearby receptors were estimated, for the purpose of determining potential health risks, only the highest estimated pollutant concentrations were used in calculating cancer risk and hazard indices. The receptor experiencing the highest estimated pollutant concentrations was considered to be the maximally exposed receptor, and would experience the highest potential health risks. Health risks to all other receptors would be lower than the health risks to the maximally exposed receptor, because all other receptors would be exposed to lower concentrations of construction-related pollutants as compared to the maximally exposed receptor.

Additionally, given the proximity of the project site to both residences and Walter E. Woodward Elementary School, the estimation of health risks conservatively assumed that receptors would be continuously exposed to pollutants from construction at the maximum estimated concentrations. This assumption would represent a scenario whereby a resident living nearby also attends the nearby school and is therefore exposed to pollutants both at home and at school. In practice, the concentrations of pollutants at Walter E. Woodward Elementary School would be substantially less than the concentration of pollutants at the maximally exposed receptor location. Additionally, due to the difference in pollutant concentrations at the maximally exposed receptor location and nearby school, a single receptor would not be anticipated to be continuously exposed to the maximum level of pollutant concentrations both at home and at school. Nevertheless, by

³⁴ Office of Environmental Health Hazard Assessment. *Air Toxics Hot Spots Program Risk Assessment Guidelines, Guidance Manual for Preparation of Health Risk Assessments* [pg. 8-18]. February 2015.

³⁵ U.S. Environmental Protection Agency. *User's Guide for the AMS/EPA Regulatory Model (AERMOD)*. December 2016.



using the maximum estimated concentrations and assuming continuous exposure to pollutants, the estimated health risks presented below are considered a worst-case estimate of potential health risks, and actual health risks to receptors in the project area would be lower than the levels presented within this analysis.

Energy Consumption

Quantitative thresholds for the analysis of potential impacts related to energy consumption have not been adopted by any local, regional, or statewide entities. Consequently, potential impacts of the project related to energy is determined based on whether the project would result in wasteful, inefficient, or unnecessary use of energy. In addition, the potential for the project to conflict with or obstruct a State or local plan for renewable energy generation or energy efficiency, such as the City of Manteca CAP, is considered. The analysis of energy consumption includes consideration of energy demand during project construction and operations.

Project-Specific Impacts and Mitigation Measures

The following discussion of impacts is based on implementation of the proposed project in comparison with the standards of significance identified above. It should be noted that GHG emissions are inherently cumulative; thus, the discussion of associated impacts is included under the Cumulative Impacts and Mitigation Measures section below.

4.3-1 Conflict with or obstruct implementation of the applicable air quality plan during project construction. Based on the analysis below, the impact is *less than significant*.

During construction of the project, various types of equipment and vehicles would temporarily operate on the project site. Construction-related emissions would be generated from construction equipment, vegetation clearing and earth movement activities, construction workers' commute, and construction material hauling for the entire construction period. The aforementioned activities would involve the use of diesel- and gasoline-powered equipment that would generate emissions of criteria pollutants. Project construction activities also represent sources of fugitive dust, which includes PM_{2.5} emissions. As construction of the proposed project would generate emissions of criteria air pollutants intermittently within the site and in the vicinity of the site, until all construction has been completed, construction is a potential concern, as the proposed project is located in a nonattainment area for ozone and PM. Based on the CalEEMod results, the maximum annual emissions from construction of the proposed project are presented in Table 4.3-7.

Table 4.3-7 Maximum Unmitigated Construction Emissions (tons/yr)			
Pollutant	Project Emissions	Threshold of Significance	Exceeds Threshold?
ROG	2.00	10	NO
NO _x	5.24	10	NO
CO	8.05	100	NO
SO _x	0.03	27	NO
PM ₁₀	2.37	15	NO
PM _{2.5}	0.88	15	NO
Source: CalEEMod, December 2021 (see Appendix C).			



As shown in the table, maximum construction emissions from the proposed project would be below the applicable thresholds of significance for the relevant criteria pollutants.

Additionally, the proposed project would be required to comply with all applicable SJVAPCD rules and regulations for construction, including, but not limited to, Regulation VIII (Fugitive PM₁₀ Prohibition), Rule 4101 (Visible Emissions), Rule 4601 (Architectural Coatings), and Rule 4641 (Cutback Slow Cure, and Emulsified Asphalt, Paving and Maintenance Operations). In addition, as discussed above, a development project would be subject to ISR requirements if full buildout the project would include or exceed the size limits specified by the SJVAPCD. As the proposed project would exceed the size limit specified, the proposed project would be subject to Rule 9510 requirements. Therefore, a reduction of construction-related NO_x and PM₁₀ emissions of 20 percent and 45 percent, respectively, would be required as compared to the unmitigated baseline, which would be achieved through a combination of SJVAPCD-approved on-site emission reduction measures, and off-site mitigation fees for the difference between required emission reductions and the mitigations achieved on-site. Compliance with the foregoing rules would likely reduce construction-related emissions to levels below those presented in Table 4.3-7.

Therefore, construction of the proposed project would not conflict with or obstruct implementation of the applicable air quality plan, and a ***less-than-significant*** impact would occur associated with construction.

Mitigation Measure(s)

None required.

4.3-2 Conflict with or obstruct implementation of the applicable air quality plan during project operation. Based on the analysis below, the impact is *less than significant*.

Operational emissions of criteria pollutants would be generated by the proposed project from both mobile and stationary sources. The use of fireplaces/hearths and vehicle trips would make up the majority of project-related emissions under unmitigated operations of the proposed project. Emissions would also occur from area sources such as natural gas combustion from heating mechanisms, landscape maintenance equipment exhaust, and consumer products (e.g., deodorants, cleaning products, spray paint, etc.).

As stated above, the proposed project would be required to comply with all SJVAPCD rules and regulations, such as those listed previously for construction, as well as the following for operations:

- Rule 4101 (Visible Emissions);
- Rule 4102 (Nuisance);
- Rule 4901 (Wood Burning Fireplaces and Wood Burning Heaters); and
- Rule 4902 (Residential Water Heaters).



Compliance with the applicable SJVAPCD rules and regulations as noted above have been included in the modeling. In addition, it should be noted that the proposed project would be subject to an ISR under SJVAPCD Rule 9510, as the number of dwelling units exceeds that of the size limits specified by the SJVAPCD, which is 50 residential units for a development project and 250 residential units for a large development project. Maximum unmitigated annual emissions resulting from operations of the proposed project are presented in Table 4.3-8.

Table 4.3-8 Maximum Unmitigated Operational Emissions (tons/yr)			
Pollutant	Project Emissions	Threshold of Significance	Exceeds Threshold?
ROG	9.92	10	NO
NO _x	7.55	10	NO
CO	41.75	100	NO
SO _x	0.11	27	NO
PM ₁₀	13.40	15	NO
PM _{2.5}	3.71	15	NO
<i>Source: CalEEMod, December 2021 (see Appendix C).</i>			

As demonstrated in Table 4.3-8, operational emissions of all applicable criteria pollutants (i.e., ROG, NO_x, CO, SO_x, PM₁₀, and PM_{2.5}) would be below the SJVAPCD's thresholds of significance. Thus, implementation of the proposed project would not conflict with or obstruct implementation of the applicable air quality plan, and a **less-than-significant** impact would occur.

Mitigation Measure(s)

None required.

4.3-3 Expose sensitive receptors to substantial pollutant concentrations. Based on the analysis below, the impact is less than significant.

The major pollutant concentrations of concern are localized CO emissions, TAC emissions, and criteria pollutant emissions, which are addressed in further detail below.

Localized CO Emissions

Localized concentrations of CO are related to the levels of traffic and congestion along streets and at intersections. Implementation of the proposed project would increase traffic volumes on streets near the project site; therefore, the project would be expected to increase local CO concentrations. High levels of localized CO concentrations are only expected where background levels are high, and traffic volumes and congestion levels are high.

In accordance with the State CO Protocol, the SJVAPCD has established preliminary screening criteria for determining whether the effect that a project would have on any given intersection would cause a potential CO hotspot. If either of the following is true for the proposed project, further CO analysis would be required:



- A traffic study for the project indicates that the LOS on one or more streets or at one or more intersections in the project vicinity would be reduced to LOS E or F; or
- A traffic study indicates that the project would substantially worsen (i.e., increase delay by more than five percent) an already existing LOS F on one or more streets or at more or more intersections in the project vicinity.

According to the Transportation Analysis that was prepared for the proposed project, with implementation of the proposed project and the required conditions of project approval, all signalized study intersections would operate at an acceptable LOS D or better under Existing Plus Project conditions.³⁶ However, as noted previously, SB 743 mandated that CEQA documents can no longer rely on LOS for determining significance conclusions. Accordingly, this analysis relies on the guidance of nearby air districts.

According to the PCAPCD screening levels, a project could result in a significant impact if the project would result in CO emissions from vehicle operations in excess of 550 lbs/day.³⁷ Per CalEEMod estimates calculated for the proposed project, operations of the proposed project would result in maximum CO emissions of 273.03 lbs/day, which is significantly under the PCAPCD screening level.

Therefore, based on the discussion above, the proposed project would not expose sensitive receptors to substantial concentrations of localized CO and impacts related to localized CO emissions would be less than significant.

TAC Emissions

Another category of environmental concern is TACs. The CARB's *Air Quality and Land Use Handbook: A Community Health Perspective* (Handbook) provides recommendations for siting new sensitive land uses near sources typically associated with significant levels of TAC emissions, including, but not limited to, freeways and high traffic roads, distribution centers, and rail yards.³⁸ The CARB has identified DPM from diesel-fueled engines as a TAC; thus, high-volume roadways, stationary diesel engines, and facilities attracting heavy and constant diesel vehicle traffic are identified as having the highest associated health risks from DPM. Health risks from TACs are a function of both the concentration of emissions and the duration of exposure.

Operation of residential developments does not typically involve substantial TAC emissions. Considering the above, the proposed project is not anticipated to involve any uses that would be considered to generate a substantial amount of TAC emissions. Therefore, the proposed project is not anticipated to result in the exposure of nearby sensitive receptors to substantial concentrations of TACs during project operations.

However, the proposed project would include construction activity within the project site that would involve the use of off-road equipment, much of which would likely be

³⁶ Fehr and Peers. *Hat Ranch Project – Transportation Analysis*. April 28, 2022.

³⁷ Placer County Air Pollution Control District. *2017 CEQA Handbook: Chapter 4, Analyzing Operations Criteria Pollutant Emissions*. 2017.

³⁸ California Air Resources Board. *Air Quality and Land Use Handbook: A Community Health Perspective*. April 2005.



diesel powered. Off-road heavy-duty diesel equipment used for site grading, paving, utility trenching and other construction activities result in the generation of DPM. Consequently, the operation of heavy equipment within the project site during project construction could result in exposure of nearby residents to DPM. The nearest existing sensitive receptors to the project site would be the single-family residences along the western and northern site borders, as well as the various agricultural-related single-family residences in the vicinity. The closest receptors are located approximately 50 feet away.

The results of AERMOD are presented in Figure 4.3-3. As presented therein, the maximally exposed receptor, depicted by a white “X”, is located north of the project site. Additionally, the cancer risk and non-cancer hazard indices associated with construction-related emissions of DPM were estimated and are presented in Table 4.3-9.

Table 4.3-9 Maximum Cancer Risk and Hazard Index Associated with Construction			
	Cancer Risk (per million persons)	Acute Hazard Index	Chronic Hazard Index
Result at Maximally Exposed Receptor	8.77	0.00	0.002
Thresholds of Significance	10.00	1.00	1.00
Exceed Thresholds?	NO	NO	NO
<i>Sources: AERMOD and HARP 2 RAST, August 2022 (see Appendix C).</i>			

As shown in Table 4.3-9, TAC emissions related to construction of the proposed project would not result in health risks to the maximally exposed receptor in excess of the SJVAPCD’s thresholds for cancer risk and/or non-cancer hazard index.

Furthermore, it is noted that all construction equipment and operation thereof would be regulated per CARB’s In-Use Off-Road Diesel-Fueled Fleets Regulation.³⁹ The In-Use Off-Road Diesel Vehicle Regulation includes emissions reducing requirements such as limitations on vehicle idling, disclosure, reporting, and labeling requirements for existing vehicles, as well as standards relating to fleet average emissions and the use of Best Available Control Technologies. Compliance with such regulations would further reduce construction emissions.

Considering the above, construction of the proposed project would not expose sensitive receptors to substantial concentrations of TACs.

³⁹ California Code of Regulations, Title 13, Article 4.8, Chapter 9, Section 2449.



Figure 4.3-3
AERMOD Results – DPM Dispersion



Source: AERMOD, August 2022 (see Appendix C).

Criteria Pollutants

As discussed in the Existing Environmental Setting section and summarized in Table 4.3-1, criteria pollutant emissions can cause negative health effects. With regard to the proposed project, the principal criteria pollutants of concern are localized CO, ozone and PM. As discussed above, the proposed project is not anticipated to result in impacts related to localized exposure of sensitive receptors to substantial concentrations of CO. Unlike CO and many TACs, due to atmospheric chemistry and dynamics, ozone and atmospheric PM typically act to impact public health on a cumulative and regional level, rather than a localized level. Due to the cumulative and regional nature of effects from criteria pollutants, the analysis of potential health effects of criteria pollutants is further discussed in Impact 4.3-5.

Conclusion

As discussed above, the proposed project would not cause any substantial levels of localized CO concentrations or other TACs. Construction-related emissions would be temporary, intermittent throughout the day, spread over the project site, and regulated. Thus, the proposed project would be expected to result in a ***less-than-significant*** impact associated with exposure of sensitive receptors to substantial levels of pollutant concentrations.

Mitigation Measure(s)

None required.

4.3-4 Result in other emissions (such as those leading to odors) affecting a substantial number of people. Based on the analysis below, the impact is *less than significant*.

Pollutants of principal concern include emissions leading to odors, emission of dust, or emissions considered to constitute air pollutants. Air pollutants have been discussed in Impacts 4.3-1 through 4.3-3 above. Therefore, the following discussion focuses on emissions of odors and dust.

Odors

Due to the subjective nature of odor impacts, the number of variables that can influence the potential for an odor impact, and the variety of odor sources, quantitative or formulaic methodologies to determine the presence of a significant odor impact do not exist. The intensity of an odor source's operations and its proximity to sensitive receptors influences the potential significance of odor emissions. Common types of facilities that have been known to produce odors in the San Joaquin Valley include, but are not limited to, wastewater treatment facilities, landfills, composting facilities, petroleum refineries, food processing facilities, feed lots, and/or dairies. The proposed project would not introduce any such land uses and is not located in the vicinity of any such existing or planned land uses.

Existing agricultural land uses are located to the south and the east of the project site. Accordingly, the future residents of the proposed project could potentially be exposed to odors associated with the ongoing agricultural operations. However, land surrounding the site is designated for residential development. In addition, a 112-foot



right-of-way dedication for the future Atherton Drive extension would be provided along the eastern border of the project site. The future Antone Raymus Parkway would also border the site to the south. The rights-of-way would serve as buffers between the project site and the ongoing agricultural operations to the east until such time as the planned residential developments occur, consistent with the Manteca General Plan. Thus, the nearby agricultural operations would not be expected to create objectionable odors that would affect a substantial number of people on the project site. Furthermore, it should be noted that Manteca Municipal Code Section 8.24.030 sets forth the City's Right-to-Farm Ordinance, requiring any transferor of property within the City to deliver a disclosure statement to the buyer that informs future residents that small-scale agricultural and farming operations may take place on nearby/surrounding parcels.

Construction activities often include diesel fueled equipment and heavy-duty trucks, which could create odors associated with diesel fumes that may be considered objectionable. However, construction activities would be temporary and operation of construction equipment would be restricted to the hours of 7:00 AM to 7:00 PM, per Section 17.58.050(E)(1) of the City's Municipal Code. In addition, while the nearest sensitive receptors are located in relatively close proximity to the project site boundary, considering the large overall development area, construction equipment would operate at various locations throughout the project site intermittently, and the distances from the nearest sensitive receptors would allow for dispersal of diesel odors. Accordingly, substantial objectionable odors would not be expected to occur during construction activities.

Nonetheless, the project would be subject to the SJVAPCD's Rule 4102, which allows members of the public to submit complaints regarding odor. Thus, although not anticipated, if odor complaints are made after the proposed project is developed, the SJVAPCD would ensure that such odors are addressed and any potential odor effects reduced to less than significant.

Dust

During construction, the project would be required to comply with all applicable SJVAPCD rules and regulations regarding fugitive dust, including Regulation VIII. The provisions of Regulation VIII are listed previously in this chapter, under Local Regulations. As noted therein, for projects in which construction-related activities would disturb greater than one acre of land, the SJVAPCD requires preparation of a Dust Control Plan or Construction Notification form before issuance of the first grading permit. The proposed project would be subject to this regulation, and submittal of the Dust Control Plan or Construction Notification would be ensured by the City as a condition of project approval.

Following project construction, vehicles operating within the project site would be limited to paved areas of the site, and non-paved areas would be landscaped. Thus, project operations would not include sources of dust that could adversely affect a substantial number of people. Following project construction, the project site would not include any exposed topsoil. Thus, project operations would not include any substantial sources of dust.



Conclusion

For the reasons discussed above, construction and operation of the proposed project would not result in emissions, such as those leading to odors and/or dust, that would adversely affect a substantial number of people, and a ***less-than-significant*** impact would occur

Mitigation Measure(s)

None required.

4.3-5 Result in the inefficient or wasteful use of energy associated with construction, or conflict with or obstruct a State or local plan for renewable energy or energy efficiency. Based on the analysis below, the impact is *less than significant*.

Discussions regarding the proposed project's potential effects related to energy demand during construction and operations are provided below.

Construction Energy Use

Construction of the proposed project would involve on-site energy demand and consumption related to use of oil in the form of gasoline and diesel fuel for construction worker vehicle trips, hauling and materials delivery truck trips, and operation of off-road construction equipment. In addition, diesel-fueled portable generators may be necessary to provide additional electricity demands for temporary on-site lighting, welding, and for supplying energy to areas of the sites where energy supply cannot be met via a hookup to the existing electricity grid. Project construction would not involve the use of natural gas appliances or equipment.

Even during the most intense period of construction, due to the different types of construction activities (e.g., site preparation, grading, building construction), only portions of the project site would be disturbed at a time, with operation of construction equipment occurring at different locations on the project site, rather than a single location. In addition, all construction equipment and operation thereof would be regulated per the CARB In-Use Off-Road Diesel Vehicle Regulation. The In-Use Off-Road Diesel Vehicle Regulation is intended to reduce emissions from in-use, off-road, heavy-duty diesel vehicles in California by imposing limits on idling, requiring all vehicles to be reported to CARB, restricting the addition of older vehicles into fleets, and requiring fleets to reduce emissions by retiring, replacing, or repowering older engines, or installing exhaust retrofits. The In-Use Off-Road Diesel Vehicle Regulation would subsequently help to improve fuel efficiency and reduce energy use. Technological innovations and more stringent standards are being researched, such as multi-function equipment, hybrid equipment, or other design changes, which could help to reduce demand on oil and emissions associated with construction.

As discussed previously, the CARB has recently prepared the 2017 Scoping Plan,⁴⁰ which builds upon previous efforts to reduce GHG emissions and is designed to continue to shift the California economy away from dependence on fossil fuels. Appendix B of the 2017 Scoping Plan includes examples of local actions (municipal

⁴⁰ California Air Resources Board. *The 2017 Climate Change Scoping Plan Update*. January 20, 2017.



code changes, zoning changes, policy directions, and mitigation measures) that would support the State's climate goals. The examples provided include, but are not limited to, enforcing idling time restrictions for construction vehicles, utilizing existing grid power for electric energy rather than operating temporary gasoline/diesel-powered generators, and increasing use of electric and renewable fuel-powered construction equipment. The regulations described above, with which the project must comply, would be consistent with the intention of the 2017 Scoping Plan and the recommended actions included in Appendix B of the 2017 Scoping Plan.

Based on the above, the temporary increase in energy use occurring during construction of the proposed project would not result in a significant increase in peak or base demands or require additional capacity from local or regional energy supplies. In addition, the proposed project would be required to comply with all applicable regulations related to energy conservation and fuel efficiency, which would help to reduce the temporary increase in demand.

Operational Energy Use

Following implementation of the proposed project, PG&E would provide electricity and natural gas to the project site. Energy use associated with operation of the proposed project would be typical of residential uses, requiring electricity and natural gas for interior and exterior building lighting, heating, ventilation, and air conditioning (HVAC), electronic equipment, machinery, refrigeration, appliances, security systems, and more. Maintenance activities during operations, such as landscape maintenance, would involve the use of electric or gas-powered equipment. In addition to on-site energy use, the proposed project would result in transportation energy use associated with vehicle trips generated by the proposed residential development.

The project would be subject to all relevant provisions of the most recent update of the CBSC, including the Building Energy Efficiency Standards. Adherence to the most recent CALGreen Code and the Building Energy Efficiency Standards would ensure that the proposed structures would consume energy efficiently through the incorporation of such features as efficient water heating systems, high performance attics and walls, and high efficacy lighting. Required compliance with the CBSC would ensure that the building energy use associated with the project would not be wasteful, inefficient, or unnecessary. In addition, electricity supplied to the project by PG&E would comply with the State's Renewables Portfolio Standard, which requires investor-owned utilities, electric service providers, and community choice aggregators to increase procurement from eligible renewable energy resources to 33 percent of total procurement by 2020 and to 60 percent by 2030. Thus, a portion of the energy consumed during project operations would originate from renewable sources.

With regard to transportation energy use, the proposed project would comply with all applicable regulations associated with vehicle efficiency and fuel economy.

Based on the above, compliance with the State's latest Energy Efficiency Standards would ensure that the proposed project would implement all necessary energy efficiency regulations. Additionally, the inclusion of solar panels and other sustainable features by the proposed project would further reduce any impacts associated with energy consumption.



Conclusion

Based on the above, construction and operation of the proposed project would not result in wasteful, inefficient, or unnecessary consumption of energy resources or conflict with or obstruct a State or local plan for renewable energy or energy efficiency, and **a less-than-significant** impact would occur.

Mitigation Measure(s)

None required.

Cumulative Impacts and Mitigation Measures

As defined in Section 15355 of the CEQA Guidelines, “cumulative impacts” refers to two or more individual effects which, when considered together, are considerable, compound, or increase other environmental impacts. The individual effects may be changes resulting from a single project or a number of separate projects. The cumulative impact from several projects is the change in the environment that results from the incremental impact of the project when added to other closely related past, present, and reasonably foreseeable probable future projects.

A project’s emissions may be individually limited, but cumulatively considerable when taken in combination with past, present, and future development projects. The geographic context for the cumulative air quality analysis includes the SJVAB.

As discussed previously, climate change occurs on a global scale, and emissions of GHGs, even from a single project, contribute to the global impact. However, due to the existing regulations within the State, for the purposes of this analysis, the geographic context for the analysis of GHG emissions presented in this EIR is the State of California.

4.3-6 Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in non-attainment under an applicable federal or State ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors). Based on the analysis below, the project’s impact is *less than significant*.

Buildout of the proposed project would lead to the release of emissions that would contribute to the cumulative regional air quality setting. The following section includes a discussion of the proposed project’s cumulative contribution to construction emissions in concert with other local proposed projects, the cumulative operational emissions associated with implementation of the project, and the cumulative health effects of exposure to criteria pollutants.

A cumulative impact analysis considers a project over time in conjunction with other past, present, and reasonably foreseeable future projects whose impacts might compound those of the project being assessed. By its very nature, air pollution is largely a cumulative impact. The nonattainment status of regional pollutants is a result of past and present development. Future attainment of ambient air quality standards is a function of successful implementation of SJVAPCD attainment plans. Consequently, the SJVAPCD’s application of thresholds of significance for criteria



pollutants is relevant to the determination of whether a project's individual emissions would have a cumulatively significant impact on air quality.

A lead agency may determine that a project's incremental contribution to a cumulative effect is not cumulatively considerable if the project would comply with the requirements in a previously approved plan or mitigation program, including, but not limited to an air quality attainment or maintenance plan that provides specific requirements that would avoid or substantially lessen the cumulative problem within the geographic area in which the project is located [CCR Section 15064(h)(1)]. Thus, as stated in Section 7.14 of the SJVAPCD *Guidance for Assessing and Mitigating Air Quality Impacts*, if project-specific emissions would exceed the thresholds of significance for criteria pollutants, the project would be expected to result in a cumulatively considerable net increase of any criteria pollutant for which the area is in non-attainment under applicable ambient air quality standards. As further discussed in Section 8.8 of the SJVAPCD *Guidance for Assessing and Mitigating Air Quality Impacts*, the SJVAPCD would consider projects consistent with the following to result in a less-than-cumulatively-significant impact related to air quality:

- SJVAPCD attainment plans;
- SJVAPCD rules and regulations;
- State air quality regulations;
- Project emissions below SJVAPCD thresholds of significance for criteria pollutants, localized CO, and TACs; and
- Project emissions below AAQS.

As presented above, the proposed project would result in construction-related and operational emissions below the applicable thresholds of significance. In addition, the proposed project would be below the applicable thresholds of significance related to localized CO and TAC concentrations. Therefore, the proposed project would not be considered to result in a cumulatively considerable net increase in any criteria pollutant for which the area is under nonattainment for a federal or State ambient air quality standard (i.e., ozone and PM). Consequently, in accordance with SJVAPCD guidance, because the proposed project would result in emissions less than the thresholds of significance, the proposed project would correspondingly be considered to result in a less-than-significant cumulative impact to air quality.

Cumulative Health Effects of Criteria Pollutants

As noted in Table 4.3-1, exposure to criteria air pollutants can result in adverse health effects. The AAQS presented in Table 4.3-2 are health-based standards designed to ensure safe levels of criteria pollutants that avoid specific adverse health effects. Because the SJVAB is designated as nonattainment for State and federal eight-hour ozone, State PM₁₀ standards, and State and federal PM_{2.5} standards, the SJVAPCD, has adopted federal and State attainment plans to demonstrate progress towards attainment of the AAQS. Full implementation of the attainment plans would ensure that the AAQS are attained and sensitive receptors within the SJVAB are not exposed to excess concentrations of criteria pollutants. The SJVAPCD's thresholds of significance were established with consideration given to the health-based air quality standards established by the AAQS, and are designed to aid the district in implementing the



applicable attainment plans to achieve attainment of the AAQS.⁴¹ Thus, if a project's criteria pollutant emissions exceed the SJVAPCD's emission thresholds of significance, a project would be considered to conflict with or obstruct implementation of the SJVAPCD's air quality planning efforts, thereby delaying attainment of the AAQS. Because the AAQSs are representative of safe levels that avoid specific adverse health effects, a project's hinderance of attainment of the AAQS could be considered to contribute towards regional health effects associated with the existing nonattainment status of ozone and PM₁₀ standards.

As discussed in Impact 4.3-1 and 4.3-2, the proposed project would not result in exceedance of the SJVAPCD thresholds of significance. Consequently, implementation of the proposed project would not conflict with the SJVAPCD's adopted attainment plans nor would the proposed project inhibit attainment of regional AAQS. Therefore, implementation of the proposed project would not contribute towards regional health effects associated with the existing nonattainment status of ozone and PM₁₀ standards.

Conclusion

As discussed above, implementation of the project would result in criteria pollutant emissions below the applicable thresholds of significance. Therefore, criteria pollutant emissions resulting from project operations would not result in a cumulatively considerable net increase in criteria pollutant emissions, for which the region is in nonattainment for federal and state ozone standards. As such, the proposed project's incremental contribution to regional air quality impacts would be ***less than significant***.

Mitigation Measure(s)

None required.

4.3-7 Generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment. Based on the analysis below and with implementation of mitigation, the proposed project's incremental contribution to this significant cumulative impact is *cumulatively considerable and significant and unavoidable*.

An individual project's GHG emissions are at a micro-scale level relative to global emissions and effects to global climate change; however, an individual project could result in a cumulatively considerable incremental contribution to a significant cumulative macro-scale impact. Estimated GHG emissions attributable to future development would be primarily associated with increases of CO₂ and, to a lesser extent, other GHG pollutants, such as CH₄ and N₂O. Sources of GHG emissions include area sources, mobile sources or vehicles, utilities (electricity and natural gas), water usage, wastewater generation, and the generation of solid waste.

As discussed above in the Standards of Significance section, neither the SJVAPCD nor the City of Manteca have adopted quantitative thresholds of significance for GHG

⁴¹ San Joaquin Valley Air Pollution Control District. *Guidance for Assessing and Mitigating Air Quality Impacts* [pg. 90]. February 19, 2015.



emissions that would apply to the proposed project. Thus, in the absence of applicable quantitative GHG thresholds, and to establish additional context in which to consider the magnitude of the project's GHG emissions, the lead agency has elected to rely on the SCAQMD's tiered approach to evaluate potential GHG impacts. Therefore, for this analysis, if the proposed project were to meet the criteria established by the applicable tiers, the project's incremental contribution would be found to be cumulatively considerable.

The proposed project would not meet the criteria established by Tier 1, as CEQA categorical exemptions do not apply to the project. Although the project would be consistent with the City of Manteca CAP, which is a locally adopted GHG reduction plan that has undergone CEQA review and includes an approved inventory and monitoring, consistency with the City of Manteca CAP does not ensure compliance with SB 32, as the CAP is intended to support the goals of AB 32, which provided initial direction on creating a comprehensive, multi-year program to limit California's GHG emissions at 1990 levels by 2020. Therefore, the project would not meet the criteria established by Tier 2.

In accordance with Tier 3, this analysis relies upon the 3,500 MTCO₂e/year threshold (option 1) for residential projects. According to the CalEEMod results, the maximum annual construction-related GHG emissions for the proposed project would be 3,104.81 MTCO₂e/year, and the maximum annual GHG emissions during project operation would be 12,610.82 MTCO₂e/yr. Consistent with SCAQMD guidance for evaluating residential/commercial sector projects, the project's maximum annual GHG emissions during construction were amortized and added to the emissions during operation for a combined total of 12,714.31 MTCO₂e/yr.⁴² Therefore, the proposed project would not meet the criteria established by Tier 3.

Pursuant to Tier 4, a project must not exceed applicable performance standards for the project service population (population plus employment). The 2020 efficiency target is 4.8 MTCO₂e/year per service population for project-level analyses. During project operation, the proposed project would generate 5.7 MTCO₂e/yr per service population (12,714.31 MTCO₂e/yr ÷ 2,214 new residents). Therefore, the project would not meet the criteria established by Tier 4. As such, in accordance with Tier 5, without implementation of mitigation, the project's GHG emissions during operations could be considered cumulatively considerable.

As discussed below, the proposed project would be subject to Mitigation Measure 4.3-8 which would require the project to demonstrate compliance with applicable measures included in the City's Climate Action Plan, to the satisfaction of the City of Manteca Development Services Department. Such measures would include exceeding current Title 24 Energy Efficiency Standards by 10 percent, or if the project design cannot meet the requirement, coordinating with the City to determine alternative options (e.g., exterior lighting, water savings, etc.). The project would also be required to implement a recycling or waste diversion program sufficient to exceed the State recycling and diversion targets by at least 10 percent. Incorporation of such design aspects would result in a reduction in the project's maximum annual GHG

⁴² South Coast Air Quality Management District. *Attachment E: Draft Guidance Document – Interim CEQA Greenhouse Gas (GHG) Significance Threshold*. [pg. 3-18]. October 2008.



emissions during project operations. However, given the flexibility of Mitigation Measure 4.3-8, the GHG emission reductions associated with implementation of such cannot be quantified at this time.

Thus, the project would generate GHG emissions that may have a significant impact on the environment, and the project's incremental contribution to the significant impact would be ***cumulatively considerable***.

Mitigation Measure(s)

Implementation of the following mitigation measure would reduce the above potential impact.

4.3-7 Implement Mitigation Measure 4.3-8.

Level of Significance Following Mitigation

Mitigation Measure 4.3-7 would require implementation of Mitigation Measure 4.3-8, which would necessitate that the project demonstrates compliance with applicable measures included in the City's Climate Action Plan to the satisfaction of the City of Manteca Development Services Department, including exceeding current Title 24 Energy Efficiency Standards by 10 percent and implementing a recycling or waste diversion program sufficient to exceed the State recycling and diversion targets by at least 10 percent. However, incorporation of such measures would not guarantee that maximum annual GHG emissions generated during project operation would be reduced such that emissions would be below the SCAQMD's 3,500 MTCO₂e/yr Tier 3 threshold for residential projects or the 2020 efficiency target of 4.8 MTCO₂e/yr per service population for Tier 4 project-level analyses. Therefore, even with incorporation of the foregoing mitigation measure, which would be in compliance with Tier 5 criteria, the project's contribution would remain *cumulatively considerable* and *significant and unavoidable*.

4.3-8 Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs. Based on the analysis below, and with implementation of mitigation, the proposed project's incremental contribution to this significant cumulative impact is *less than cumulatively considerable*.

The City of Manteca CAP is intended to support the goals of AB 32. The CAP is designed to reduce community-related and City operations-related GHG emissions to a degree that would not hinder or delay implementation of AB 32. In order to do such, the City has outlined a course of action for the City government and the community of Manteca to reduce per capita GHG emissions.

For new development projects constructed in the City of Manteca, the CAP requires the development projects to achieve GHG emissions reductions by implementing specific reduction strategies. The proposed project's consistency with the reduction strategies in the CAP is assessed in Table 4.3-10 below. As shown below, with implementation of Mitigation Measure 4.3-8, the proposed project would comply with



all applicable measures presented within the CAP and, therefore, would not conflict with the goals established by AB 32. However, without the required implementation of Mitigation Measure 4.3-8, consistency with several measures cannot be ensured at this time, and a potentially significant impact could occur.

**Table 4.3-10
Project Consistency with the City of Manteca CAP**

CAP Strategy	Consistency Discussion
Comply with the applicable land use, sustainable development, and resource conservation policies of the Manteca General Plan.	<p>Low-density residential development associated with the Pillsbury Estates, Woodward Park, and Evans Estates communities are located to the north and the west of the project site, while the lands directly south and east of the project site are planted with orchards. However, land surrounding the project site on all sides is currently designated as LDR by the existing City of Manteca General Plan. As a result, the proposed residential development would be a consistent land use with the existing General Plan designation, and with the land use types and development intensity to the north and west. As noted throughout this EIR, the project would be required to comply with applicable General Plan policies. Based on the above, the proposed project would comply with this measure.</p> <p>Please refer to Chapter 4.9, Land Use and Planning/Population and Housing, and, specifically, Table 4.9-3, of this EIR for a more thorough evaluation of project compliance with applicable policies.</p>
Construct project transportation infrastructure that supports walking, bicycling, and transit use.	<p>All interior roadways included as part of the proposed project would provide pedestrian infrastructure by including four- to eight-foot-wide sidewalks. In addition, the proposed Antone Raymus Expressway and Atherton Drive would each include a five-foot-wide bicycle lane.</p> <p>As such, the proposed project would comply with this measure.</p>
Implement Transportation Demand Management (TDM) programs in projects with large numbers of employees.	<p>According to the CAP, the SJVAPCD has adopted Rule 9410, Employer Based Trip Reduction, which requires employers with over 100 employees to implement trip reduction programs. Considering the proposed residential development plus elementary/middle school would not involve the employment of 100 or more employees, this measure does not apply to the proposed project.</p>
Design and construct project buildings to exceed Title 24 Energy Efficiency Standards by at least 10 percent.	<p>The City of Manteca CAP was adopted in 2013 and, thus, the applicable Title 24 standards at the time of adoption were the 2010 Energy Efficiency Standards. The current 2019 Energy Efficiency Standards are greater than 10 percent more efficient than the 2010 standards. However, this CAP Strategy does not require that projects exceed the 2010 standards by ten percent but, rather, specifies that projects are required to exceed the currently applicable standards by 10 percent. The proposed project would be required to comply with all applicable standards</p>

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Table 4.3-10 Project Consistency with the City of Manteca CAP	
CAP Strategy	Consistency Discussion
	set forth in 2019 Title 24. However, the applicant has not committed to a 10 percent exceedance of the 2019 standards at this time. Implementation of Mitigation Measure 4.3-8 would ensure compliance with this measure.
Implement project buildings including water conservation measures that meet or exceed the California Green Building Code standards 20 percent requirement.	The proposed project would be required to meet the water efficiency regulations within the CALGreen Code. As such, the proposed project would comply with this measure.
Install project landscaping that meets or exceeds water conservation standards of the City's adopted landscaping ordinance 20 percent reduction requirement.	Landscaping within the project site would be required to comply with the CALGreen Code and all water efficiency measures therein, including the MWEL0. In addition, the project would be required to comply with the adopted water conservation standards set forth in Chapter 17.48 of the City's Municipal Code. As such, the proposed project would comply with this measure.
Develop programs to exceed state recycling and diversion targets by at least 10 percent.	Pursuant to Municipal Code Section 13.02.120, all construction materials associated with the proposed project shall be recycled. The City of Manteca offers a free commercial recycling pickup service which would be available to the proposed project during operations. Implementation of Mitigation Measure 4.3-8 would ensure compliance with this measure.
Source: City of Manteca. Climate Action Plan. October 15, 2013.	

Compliance with SB 32

Appendix B to the CARB's 2017 Scoping Plan provides examples of potentially feasible mitigation measures that could be considered to assess a project's compliance with the 2017 Scoping Plan. Because the 2017 Scoping Plan represents the CARB's strategy for meeting the State's 2030 GHG emissions reductions goals, compliance with the Local Actions within the 2017 Scoping Plan would demonstrate the project's compliance with SB 32. The project's consistency with the Local Actions within the 2017 Scoping Plan is assessed in Table 4.3-11 below.

Table 4.3-11 Project Consistency with the 2017 Scoping Plan	
Suggested Measure	Consistency Discussion
Construction	
Enforce idling time restrictions for construction vehicles.	CARB's In-Use Off-Road Vehicle Regulations include restrictions that limit idling time to five minutes under most situations. Construction fleets and all equipment operated as part of on-site construction activities would be subject to CARB's idling restrictions. As such, the proposed project would be required to comply with this measure.

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Table 4.3-11
Project Consistency with the 2017 Scoping Plan

Suggested Measure	Consistency Discussion
Require construction vehicles to operate with the highest tier engines commercially available.	CARB's In-Use Off-Road Vehicle Regulation prohibits the addition of Tier 0 and Tier 1 engines to fleet. In addition, since January 1, 2018, Tier 2 engines have not been allowed to be added to fleets. Construction vehicles used as part of project construction would be subject to the In-Use Off-Road Vehicle Regulation; as such, any vehicle added to the project contractor's fleet as part of project construction would be Tier 3 or higher. In addition, as discussed under Impact 4.3-1, construction emissions would be below the SJVAPCD's thresholds. Thus, the project would comply with this measure.
Divert and recycle construction and demolition waste, and use locally-sourced building materials with a high recycled material content to the greatest extent feasible.	The CALGreen Code requires the diversion of construction and demolition waste, and the proposed project would be required to comply with the most up-to-date CALGreen Code. The project applicant would pursue the feasibility of using locally-sourced building materials or materials with a high recycled content.
Minimize tree removal, and mitigate indirect GHG emissions increases that occur due to vegetation removal, loss of sequestration, and soil disturbance.	The proposed project would result substantial soil disturbance as well as removal of the on-site orchard and other vegetation. However, as part of the proposed project, landscaping would be provided along all roadways, residence frontages, and park areas. Thus, the project would generally comply with the intent of this measure.
Utilize existing grid power for electric energy rather than operating temporary gasoline/diesel powered generators.	The contractor would use existing grid electricity to the extent feasible. However, the possibility exists that temporary generators would be used for electricity in instances where grid electricity is not accessible. Overall, the project would be considered to generally comply with the suggested measure.
Increase use of electric and renewable fuel powered construction equipment and require renewable diesel fuel where commercially available.	The City does not require the use of alternatively-fueled construction equipment, unless warranted by mitigation, which is not the case for this project. Furthermore, the commercial availability of renewable diesel in the project area is currently unknown. However, it is noted that the proposed project's construction emissions would be below the applicable SJVAPCD's thresholds.
Require diesel equipment fleets to be lower emitting than any current emission standard.	The project applicant has not committed to reducing emissions from the construction fleet beyond any current emissions standards. However, it is noted that construction emissions would be below the SJVAPCD's thresholds.

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Table 4.3-11 Project Consistency with the 2017 Scoping Plan	
Suggested Measure	Consistency Discussion
Operations	
Comply with lead agency's standards for mitigating transportation impacts under SB 743.	The City of Manteca has not yet adopted standards for mitigating transportation impacts under SB 743. However, an analysis of project-level vehicle miles travelled (VMT) was prepared for the proposed project. As noted in Chapter 4.12, Transportation, VMT impacts resulting from implementation of the project are expected to be significant and unavoidable. As a result, even with the implementation of Mitigation Measure 4.12-2, the proposed project may conflict with this suggested measure.
Require on-site EV charging capabilities for parking spaces serving the project to meet jurisdiction-wide EV proliferation goals.	Pursuant to the 2019 CALGreen Code, residential projects are required to install a listed raceway to accommodate a dedicated 208/240-volt branch circuit for each unit, which would be suitable for EV charging. Compliance with the 2019 CALGreen Code would ensure that the proposed project provides sufficient EV charging infrastructure to comply with this suggested measure.
Dedicate on-site parking for shared vehicles.	This measure is intended for non-residential uses; as such, the measure would not apply to the residential subdivision component of the project. However, it should be noted that the project would consist of 16.1 acres of Public/Quasi-Public-designated land, intended for a school site. The school site would include a bus program. As buses are inherently shared vehicles, the proposed project would be generally consistent with this measure.
Provide on- and off-site safety improvements for bike, pedestrian, and transit connections, and/or implement relevant improvements identified in an applicable bicycle and/or pedestrian master plan.	The proposed project is consistent with the Active Transportation Plan and would construct sidewalks on Pillsbury Road and on internal streets, providing adequate connections to and throughout the project site for pedestrians. In addition, bicycle lanes would be provided that connect to existing bike lanes in the project vicinity. Considering the above, the proposed project would be generally consistent with the suggested measure.
Require on-site renewable energy generation.	The CBSC requires that residential structures that are three-stories or less in height be constructed with renewable energy systems sufficient to provide 100 percent of the electricity required for the residence. The proposed single-family residences would be subject to such requirements. Due to the CBSC's requirements regarding renewable energy systems for residential land uses, the proposed project would include on-site renewable energy generation and would comply with this measure.

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**Table 4.3-11
Project Consistency with the 2017 Scoping Plan**

Suggested Measure	Consistency Discussion
Prohibit wood-burning fireplaces in new development, and require replacement of wood-burning fireplaces for renovations over a certain size development.	The proposed project would not include the installation of wood-burning fireplaces. As such, the proposed project would comply with this measure.
Require cool roofs and “cool parking” that promotes cool surface treatment for new parking facilities as well as existing surface lots undergoing resurfacing.	The 2019 CBSC contains requirements for the thermal emittance, three-year aged reflectance, and Solar Reflectance Index (SRI) of roofing materials used in new construction and re-roofing projects. Therefore, the proposed project would generally comply with the suggested measure.
Require solar-ready roofs.	The 2019 CBSC requires that new residential structures under three stories generate 100 percent of electricity needs from on-site solar. Therefore, the proposed project would comply with this suggested measure.
Require organic collection in new developments.	The City of Manteca offers organic waste collection service to residential customers. As such, future residents would have access to the organic collection service, and the project would comply with the suggested measure.
Require low-water landscaping in new developments (see CALGreen Divisions 4.3 and 5.3 and the Model Water Efficient Landscape Ordinance [MWEL0], which is referenced in CALGreen). Require water efficient landscape maintenance to conserve water and reduce landscape waste.	Landscaping within the project site would be required to comply with the CALGreen Code and all water efficiency measures therein, including the MWEL0 or any similar regulations adopted by the City of Manteca. Accordingly, the proposed project is anticipated to comply with this measure.
Achieve Zero Net Energy performance building standards prior to dates required by the Energy Code.	Through the CBSC requirements, the proposed single-family residences are anticipated to achieve Zero Net Energy. Therefore, the proposed project is anticipated to comply with this measure.
Encourage new construction, including municipal building construction, to achieve third-party green building certifications, such as the GreenPoint Rated program, LEED rating system, or Living Building Challenge.	The project applicant has not committed to achieving third-party green building certification. Consequently, compliance with this suggested measure is uncertain at this time. However, it is noted that neither the CBSC nor the City of Manteca requires new residential developments to achieve third-party green building certification.
Require the design of bike lanes to connect to the regional bicycle network.	The proposed project would include improvements to Antone Raymus Parkway and Atherton Drive, both of which would include the implementation of five-foot-wide bicycle lanes. The proposed bike lanes would generally connect to the existing Class II bike lanes that provide access to Woodward Park, and the proposed bike lanes are identified in the City's Bicycle Master Plan. Thus, the project would comply with the suggested measure.

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<p style="text-align: center;">Table 4.3-11 Project Consistency with the 2017 Scoping Plan</p>	
Suggested Measure	Consistency Discussion
Expand urban forestry and green infrastructure in new land development.	Landscaping improvements would be included throughout the project site, including new trees, various shrubs and grasses. As such, the proposed development would expand upon urban forestry and green infrastructure, and would comply with the measure.
Require gas outlets in residential backyards for use with outdoor cooking appliances such as gas barbeques if natural gas service is available.	The project applicant has not committed to providing natural gas service for outdoor cooking appliances. Accordingly, compliance with this measure is uncertain at this time.
Require the installation of electrical outlets on the exterior walls of both the front and back of residences to promote the use of electric landscape maintenance equipment.	Pursuant to the California Electrical Code, Article 210.52(E), the project would be required to include at least one electrical outlet to be located in the perimeter of a balcony, desk, or porch. The project applicant has not committed to providing additional exterior electrical outlets to promote the use of electric landscape maintenance equipment. Consequently, the project would generally comply with the suggested measure.
Require the design of the electric outlets and/or wiring in new residential unit garages to promote electric vehicle usage.	The CBSC requires that new residential unit garages be designed with wiring sufficient to provide future installation of electric vehicle charging infrastructure. Therefore, the proposed project would be required to comply with this measure.
Require the installation of energy conserving appliances such as on-demand tank-less water heaters and whole-house fans.	Title 20 and Title 24 of the CCR require the use of energy efficient appliances and building systems. The proposed project would be required to comply with all applicable efficiency standards sets forth in Title 20 and Title 24 and, therefore, the project would substantially comply with the suggested measure.
Require each residential and commercial building equip buildings [sic] with energy efficient AC units and heating systems with programmable thermostats/timers.	As noted above, the proposed project would be required to comply with all energy efficiency standards set forth in Title 20 and Title 24 of the CCR. As such, the project would generally comply with the suggested measure.
Require large-scale residential developments and commercial buildings to report energy use, and set specific targets for per-capita energy use.	Due to logistical reasons, the applicant cannot commit to reporting energy use. Accordingly, compliance with this measure is uncertain at this time.
Require each residential and commercial building to utilize low flow water fixtures such as low flow toilets and faucets (see CALGreen Divisions 4.3 and 5.3 as well as Appendices A4.3 and A5.3).	The proposed project would be required to comply with the residential water efficiency regulations within CALGreen. Thus, the proposed project would comply with this suggested measure.

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Table 4.3-11 Project Consistency with the 2017 Scoping Plan	
Suggested Measure	Consistency Discussion
Require the use of energy-efficient lighting for all street, parking, and area lighting.	All proposed exterior lighting would be LED type, consistent with the 2019 Building Energy Efficiency Standards. Thus, the proposed project would comply with the suggested measure.
Require the landscaping design for parking lots to utilize tree cover and compost/mulch. Incorporate water retention in the design of parking lots and landscaping, including using compost/mulch.	All parking areas proposed as part of the project would include landscaping features, including mulch. As such, the project would comply with the suggested measure.
Require the development project to propose an off-site mitigation project which should generate carbon credits equivalent to the anticipated GHG emission reductions. This would be implemented via an approved protocol for carbon credits from California Air Pollution Control Officers Association (CAPCOA), the California Air Resources Board, or other similar entities determined acceptable by the local air district. The project may alternatively purchase carbon credits from the CAPCOA GHG Reduction Exchange Program, American Carbon Registry (ACR), Climate Action Reserve (CAR) or other similar carbon credit registry determined to be acceptable by the local air district.	<p>The suggested measures included in the 2017 Scoping Plan are not considered to be requirements for local projects under CEQA, but instead represent options for projects to demonstrate compliance with the 2017 Scoping Plan. The inclusion of GHG off-set mitigation projects or the purchase of carbon credits is typically dependent on a project's exceedance of the previously identified quantitative GHG thresholds. However, neither SJVAPCD nor the City have identified quantitative thresholds that could be used to determine that the project's anticipated emissions would be such that an off-site mitigation project or purchase of GHG reduction credits would be required in order to comply with SB 32.</p> <p>Considering that the project has been shown to be generally consistent with the foregoing measures, the City, in its discretion as lead agency, has chosen not to require the project to implement an off-site mitigation project or purchase GHG reduction credits.</p>
Source: California Air Resources Board. AB 32 Scoping Plan [Appendix B]. Accessible at: https://www.arb.ca.gov/cc/scopingplan/scopingplan.htm. Accessed March 2022.	

As shown in Table 4.3-11, the proposed project would comply with the majority of the suggested measures presented above. Although compliance with some measures is uncertain at this time, and the project may not comply with the measure related to SB 743, the measures are guiding suggestions for consideration by lead agencies, and compliance with every measure is not required for a project to be considered generally consistent with the intent of the plan. Overall, the proposed project would generally comply with the suggested measures and, thus, the proposed project would be considered consistent with the 2017 Scoping Plan.

The SJCOG's 2018 RTP/SCS reflects a region-specific, balanced multimodal plan that not only achieves the intent and promise of SB 375, but can be implemented through existing and planned programs or policies. For the purposes of this analysis, the conformance of the proposed project with the overall goal of the 2018 RTP/SCS to reduce regional GHG emissions is generally considered.



The 2018 RTP/SCS includes 27 strategies, the majority of which are targeted for implementation at the regional planning level. For example, Strategy #1 relates to encouraging efficient development patterns throughout the City, and Strategy #11 relates to improving the communication and coordination between agencies and the public for emergency preparedness. Therefore, only the strategies that are directly applicable to the proposed project are discussed in Table 4.3-12 below:

Table 4.3-12 Project Consistency with the 2018 RTP/SCS	
RTP/SCS Strategy	Consistency Discussion
Strategy #2: Enhance the Connection between Land Use and Transportation Choices through Projects Supporting Energy and Water Efficiency	Compliance with State regulations would ensure that the proposed project is energy and water efficient. Thus, the project would comply with this strategy.
Strategy #3: Improve Air Quality by Reducing Transportation-Related Emissions	As required by Mitigation Measure 4.12-2, the project would be required to include a Transportation Demand Management Plan to reduce VMT, which would, in turn, reduce transportation-related emissions. Thus, the project would comply with this strategy.
Strategy #7: Provide Transportation Improvements to Facilitate Non-Motorized Travel, including Incorporation of Complete Streets Elements as Appropriate	The proposed project would include improvements to Antone Raymus Parkway, including five-foot-wide bicycle lanes and a detached sidewalk, both of which are standard elements of complete streets. Thus, the project would comply with this strategy.
Strategy #8: Improve Major Transportation Corridors to Minimize Impacts on Rural Roads	Refer to the discussion above.
Strategy #27: Enhance Public Health through Active Transportation Projects	Refer to the discussion above.
Source: San Joaquin Council of Governments. 2018 Regional Transportation Plan Sustainable Communities Strategy. Adopted June 2018.	

As demonstrated in Table 4.3-12, the proposed project is considered to be consistent with the 2018 RTP/SCS.

Because the 2017 Scoping Plan and the 2018 RTP/SCS are considered the applicable strategies for meeting the State's 2030 emissions goals established by SB 32, and the proposed project would be consistent with both strategies, the proposed project would be considered to comply with the goals of SB 32.

Conclusion

As noted previously, the 2017 Scoping Plan and 2018 RTP/SCS are considered the applicable plans to achieve the goals established by SB 32. The proposed project would be consistent with both the 2017 Scoping Plan and 2018 RTP/SCS and, thus, is considered to comply with SB 32. The City's CAP was established to ensure the City's compliance with the statewide GHG reduction goals required by AB 32. As



demonstrated in the table above, implementation of Mitigation Measure 4.3-8 would be required to ensure consistency with all applicable measures within the City's CAP. However, without mitigation, the proposed project could generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment, or conflict with any applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs, and a **cumulatively considerable** impact could occur.

Mitigation Measure(s)

Implementation of the following mitigation measures would reduce the above potential impact.

4.3-8 *Prior to issuance of any grading or building permits, Project Building Plans shall demonstrate compliance with the following applicable measures included in the City's Climate Action Plan, to the satisfaction of the City of Manteca Development Services Department:*

- *Provide proof (through calculations or other) that the proposed project would exceed current Title 24 Energy Efficiency Standards by 10 percent. If the project design cannot meet this requirement, the project applicant shall coordinate with the City to determine alternative options (e.g., exterior lighting, water savings, etc.); and*
- *Provide proof (through calculations, notation on project plans, or other) that the proposed project shall implement a recycling or waste diversion program sufficient to exceed the State recycling and diversion targets by at least 10 percent.*

Level of Significance Following Mitigation

Compliance with Mitigation Measure 4.3-8 would require the project to demonstrate compliance with applicable measures included in the City's Climate Action Plan, to the satisfaction of the City of Manteca Development Services Department, including exceeding current Title 24 Energy Efficiency Standards by 10 percent and implementing a recycling or waste diversion program sufficient to exceed the State recycling and diversion targets by at least 10 percent. Implementation of the following mitigation measure would reduce the above impact to a *less than cumulatively considerable* level.



4.4 BIOLOGICAL RESOURCES

4.4 BIOLOGICAL RESOURCES

4.4.1 INTRODUCTION

This chapter of the EIR evaluates the biological resources known to occur or potentially occur within the proposed project site. This chapter describes potential impacts to those resources and identifies measures to eliminate or substantially reduce those impacts to a less-than-significant level. Existing plant communities, wetlands, wildlife habitats, and potential for special-status species and communities are discussed for the project site and off-site improvement areas. The information contained in the analysis is primarily based on the Biological Resource Analysis (BRA) (see Appendix D) prepared by Monk & Associates, Inc.,¹ the City of Manteca General Plan,² and the City of Manteca General Plan EIR.³

In response to the Notice of Preparation (NOP), the City received comments related to biological resources regarding the potential for the proposed project to displace wildlife. The comments have been carefully reviewed and considered by the City of Manteca and are reflected in the analysis of impacts in this chapter.

4.4.2 EXISTING ENVIRONMENTAL SETTING

The following sections describe the existing environmental setting and biological resources occurring in the proposed project region and include discussions on the regional setting in which the project site is located, the setting of the project site, the project site's plant communities, and special-status species potentially occurring on-site.

Regional Setting

The project site is located in a currently unincorporated area of San Joaquin County, southeast of the City of Manteca limits, south of State Route (SR) 120 and west of SR 99 (see Figure 3-1 of the Project Description chapter). The City limits currently make up the project's western, northern, and eastern boundaries. The site is located within the 20-year Planning Horizon of Manteca's existing Sphere of Influence (SOI).

Per the City's General Plan, the City is a relatively compact, urbanized community with an established civic center, surrounded by agricultural land. The City is divided by the Tidewater Bikeway, which was a former railroad right-of-way. The land surrounding the urbanized portion of the City is predominantly farmland, including alfalfa, orchards, row crops, and pasture. Riparian woodland is found along the San Joaquin River to the west of the City and along the Walthall Slough tributary. Riparian woodland is of special local interest, as riparian woodland exists as the City's last remnant of natural vegetation that was once more extensive. Riparian woodland provides food and cover for a large number of wildlife species. Wetlands have also been identified along SR 120 in the eastern portion of the City.

¹ Monk & Associates, Inc. *Biological Resource Analysis, Hat Ranch Property, City of Manteca, California*. December 1, 2020.

² City of Manteca. *Manteca General Plan 2023 Policy Document*. October 6, 2003.

³ City of Manteca. *City of Manteca General Plan 2023 Environmental Impact Report*. Certified October 6, 2003.



Summers in the City are hot, arid, and clear. Winters are short, cold, wet, and partly cloudy. Over the course of the year, the temperature typically varies from 39 degrees Fahrenheit (°F) to 95 °F and rarely drops below 30 °F or exceeds 103 °F. The topography is essentially flat, with a maximum elevation change of 26 feet and an average elevation above sea level of 36 feet.⁴

Project Setting

The project site, depicted in Figure 4.4-1, consists of three parcels totaling approximately 184.7 acres. The project site is currently designated Urban Reserve-Low Density Family Residential (UR-LDR), Park (P), and Commercial Mixed Use (CMU) by the City of Manteca General Plan. The San Joaquin County General Plan designates the site as Agriculture-Urban Reserve (A/UR).

The project site is bisected by an unpaved road that extends through the site in a north-to-south direction, south from the current terminus of Pillsbury Road. The property is located in an agricultural area that is planned for residential development. Three housing developments are immediately adjacent to the project site, the first being Pillsbury Estates to the north of the western half of the site, the second being Evans Estates to the west, and the third being Woodward Park to the north of the eastern half of the project. Almond orchards, berry farms and vineyards border all other sides of the property. An approximately 20,000-square-foot (sf) residence currently exists on-site. The residence is bordered by landscape vegetation. The remainder of the project site consists of vineyards and contains a large barn, an office structure, and a tree-lined driveway.

Additionally, Polk Street, Buena Vista Drive, Inyo Avenue, and Jigsaw Avenue are stubbed in the surrounding neighborhoods at the northern and western edges of the project site.

Over 40 years of agricultural practices on the project site and in the surrounding areas have altered the property's natural topography. The 1972 USGS Manteca quadrangle shows a dashed blue-line drainage cutting through the northwestern corner of the project site, exiting the site, and then re-entering the northern end of the northeastern side of the project site. Based on the straightness of the dashed blue lines, the drainage appears to have been historically channelized. Currently, evidence of the drainage does not exist on the project site. Agricultural activities on- and off-site have likely changed the natural drainage patterns, resulting in the removal of this feature sometime in the distant past.

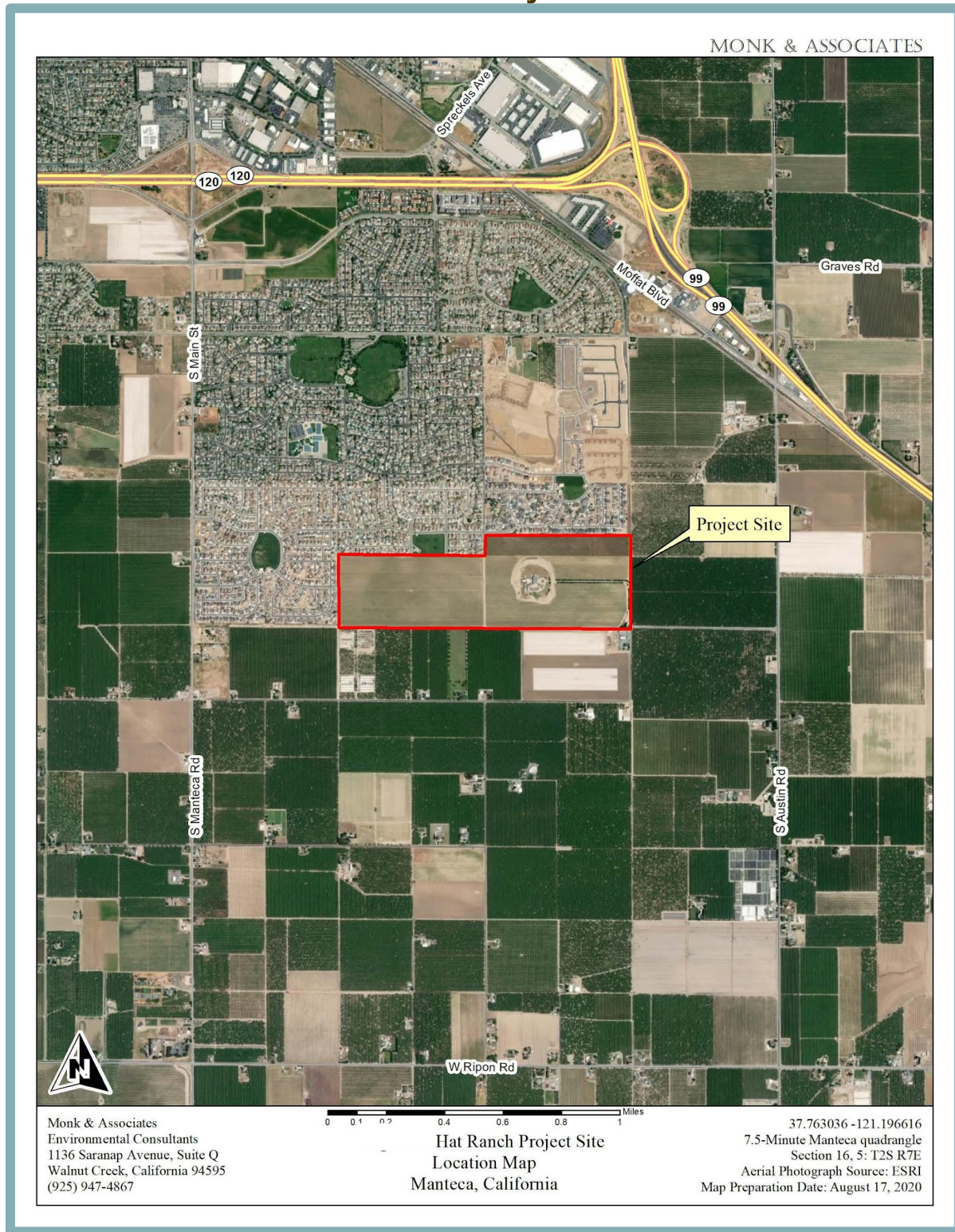
Plant Communities and Associated Wildlife Habitats

The existing plant communities on the project site are the vineyards planted throughout the property. The existing residence and the structure's landscape vegetation are the only physical break from the rows of grapes. The ornamental landscaping around the residence has not been well-maintained recently and is interspersed with ruderal (weedy), herbaceous vegetation. The following is a discussion of the site's vineyard and ornamental landscaping:

⁴ Weather Spark. *Average Weather in Manteca, California, United States*. Available at: <https://weatherspark.com/y/1086/Average-Weather-in-Manteca-California-United-States-Year-Round>. Accessed December 2020.



**Figure 4.4-1
Hat Ranch Project Site**



Vineyard

Vineyards are a type of “plantation” community because a vineyard is composed of grape vines typically planted in rows. The majority of the grape vines within the project site are well maintained. However, in the northeastern portion of the project site, a section of the vineyard appears decadent and overgrown. Within the overgrown section of the vineyard, the grape vines, typically trained to grow on wires, have become long and rangy and have extended past the wires onto the ground. A few small cottonwood trees have also established sporadically within the section. The project site’s overgrown vineyard section is heavily interspersed with ruderal herbaceous habitat. Ruderal communities are assemblages of plants that thrive in waste areas, roadsides and other sites that have been disturbed by human activity.

Vineyards, unless organically grown, require a high number of pesticides, herbicides and rodenticides. The use of these chemicals typically limits the diversity of animals that are found in proximity to these growing sites. Rodenticides are often applied to control ground squirrels and other agricultural pests. Herbicides and pesticides are applied to the vines to control insect damage, which in turn limits the number of insect-eating birds found foraging on and among the vines. The decadent vineyard on the project site appears unmaintained and therefore, has likely not been treated with herbicides or pesticides. Thus, the decadent vineyard may provide additional foraging habitat for birds, rodents, and rabbits, which in turn, provide a prey source for raptors (birds of prey), red foxes (*Vulpes vulpes*) and coyote (*Canis latrans*). As part of the BRA’s analysis, raccoon (*Procyon lotor*) tracks were observed in the sand along the vineyard’s vehicle access road. Rodent burrows were not observed on the project site. Years of poisoning rodents – not only on the project site, but in the surrounding orchards and farms – have likely reduced any local rodent populations to a significant degree.

Ornamental Landscaping

Ornamental vegetation is planted around the existing residence. The ornamental vegetation includes lawn areas, trees, shrubs, perennial plants and vines. Some examples of landscape vegetation on-site include a pomegranate tree (*Punica granatum*), apricot tree (*Prunus armeniaca*), English ivy (*Hedera helix*), wisteria (*Wisteria sp.*) and red canna lily (*Canna sp.*). Interior live oak (*Quercus wislizenii*), a native California oak tree, has been planted in rows along both sides of the long driveway leading to the residence.

The lawns surrounding the house are not well maintained or manicured, and a number of weedy grass and forb species such as puncture vine (*Tribulus terrestris*), Indian chickweed (*Mollugo verticillata*), common dandelion (*Taraxacum officinale*), hairy crabgrass (*Digitaria sanguinalis*) and red-stem filaree (*Erodium cicutarium*) have become established in the sod.

Ornamental vegetation typically provides habitat for birds and small mammals that are found in urban or suburban settings. Bird species including Northern Mockingbird (*Mimus polyglottos*), California Scrub Jay (*Aphelocoma californica*), Mourning Dove (*Zenaida macroura*) and Anna’s Hummingbird (*Calypte anna*) were observed on this site near the residence. A cottontail rabbit (*Sylvilagus audubonii*), which is more common in fields and horse pastures than near residences, was observed using habitat in both the lawn area and the adjacent vineyard.

Potential Special-Status Species on the Project Site

The following sections describe the concepts and terminology used in evaluating special-status plant and wildlife species within the context of the CEQA, followed by discussions of the potential special-status plant and wildlife species within the vicinity of the project site.



Concepts and Terminology

The following terms have important bearing upon properly evaluating biological resources within the context of the CEQA.

“Habitat” refers to the environment that supports an animal or plant. Factors that affect the habitat of an animal or plant include biotic factors such as the other plants and animals present in the habitat, and abiotic factors, such as the average temperature and presence or absence of surface water.

“Riparian” is a term used to describe something, often habitat, that is situated on the banks of a river. For instance, a riparian forest would be a forest that grows along the banks of a river and is heavily influenced by the presence of the river.

“Special-status species” are species that have been listed as “threatened” or “endangered” under the Federal Endangered Species Act (FESA), California Endangered Species Act (CESA), or are of special concern to federal resource agencies, the State, or private conservation organizations. A species may be considered special-status due to declining populations, vulnerability to habitat change, or restricted distributions.

A description of the criteria and laws pertaining to special-status classifications is described below. Special-status plant species may meet one or more of the following criteria:

- Plants listed or proposed for listing as threatened or endangered under the FESA (Title 50, Code of Federal Regulations [CFR] Section 17.12 for listed plants and various notices in the Federal Register for proposed species);
- Plants that are candidates for possible future listing as threatened or endangered under the FESA (50 CFR Section 17, October 25, 1999; 57533-57547);
- Plants listed or proposed for listing by the State of California as threatened or endangered under the CESA (Title 14, California Code of Regulations [CCR] Section 670.5);
- Plants that meet the definitions of rare or endangered species under CEQA (CEQA Guidelines, Section 15380); or
- Plants considered by the California Native Plant Society (CNPS) to be “rare, threatened, or endangered” in California (Lists 1A, 1B, 2A, 2B, and 3 species in CNPS [2001]).

Special-status wildlife species may meet one or more of the following criteria:

- Wildlife listed as threatened or endangered, or proposed or candidates for listing by the United States Fish and Wildlife Service (USFWS) or National Marine Fisheries Service (NMFS) under the FESA (50 CFR Section 17.11 for listed wildlife and various notices in the Federal Register for proposed species);
- Wildlife listed or proposed for listing by the State of California as threatened and endangered under the CESA (14 CCR Section 670.5);
- Wildlife that meet the definitions of rare or endangered species under CEQA (CEQA Guidelines Section 15380);
- Wildlife identified as Medium or High priority species by the Western Bat Working Group (WBWG);
- Wildlife species of special concern (SSC) to the California Department of Fish and Wildlife (CDFW) (Remsen [1978] for birds; Williams [1986] for mammals); and/or



- Wildlife species that are fully protected in California (California Fish and Game Code [CFGF], Section 3511 [birds], 4700 [mammals], and 5050 [reptiles and amphibians]).

Several species of plants and animals within California have low populations, limited distributions, or both. Such species may be considered “rare” and are vulnerable to extirpation as the State’s human population grows and the habitats these species occupy are converted to agricultural and urban uses. As described below, State and federal laws have provided the CDFW and the USFWS with a mechanism for conserving and protecting the diversity of plant and animal species native to the State. A number of native plants and animals have been formally designated as threatened or endangered under State and federal endangered species legislation. Others have been designated as “candidates” for such listing. Still others have been designated as “species of special concern” by the CDFW. In addition, the CNPS has developed a set of lists of native plants considered rare, threatened, or endangered. Collectively, these plants and animals are referred to as “special-status species.” Further definitions of legal status are provided below pertaining to the special-status species discussed in this chapter.

Federal Endangered or Threatened Species

A species listed as endangered or threatened under the FESA (16 U.S. Code [U.S.C.] 1531-1544) is protected from unauthorized “take” of that species. “Take” is a specifically defined term by both the CESA and FESA. FESA defines take as removing, harming, killing, or harassing any listed species, while CESA does not include the terms harm or harass. If an otherwise lawful activity necessitates the take of a federally listed endangered or threatened, permission from the USFWS must be obtained prior to initiating the take.

State Threatened Species

A species listed as threatened under the CESA (CFGF Section 2050) is protected from unauthorized take of that species. If an otherwise lawful activity necessitates the take of a State-listed threatened species, permission from the CDFW must be obtained prior to initiating the “take.”

California Species of Special Concern

The California Species of Special Concern designation refers to a species in which California breeding populations are seriously declining and extirpation from all or a portion of the species’ range is possible. The designation affords no legally mandated protection; however, pursuant to the CEQA Guidelines (14 CCR Section 15380), some species of special concern could be considered “rare.” Pursuant to a species’ rarity status, any unmitigated impacts to rare species could be considered a “significant effect on the environment.” Thus, species of special concern must be considered in any project that will, or is currently, undergoing CEQA review, and/or that must obtain an environmental permit(s) from a public agency.

CNPS Rank Species

The CNPS maintains an inventory of special-status plant species, which has four lists of plants with varying rarity. The lists are Rank 1, Rank 2, Rank 3, and Rank 4. Although plants on these lists have no formal legal protection (unless they are also a State or federally listed species), the CDFW requests the inclusion of Rank 1 species in environmental documents. In addition, other State and local agencies may request the inclusion of species on other lists as well. The Rank 1 and 2 species are defined below:



- Rank 1A – Presumed extinct in California;
- Rank 1B – Rare, threatened, or endangered in California and elsewhere;
- Rank 2A – Plants presumed extirpated in California, but more common elsewhere; and
- Rank 2B – Rare, threatened, or endangered in California, but more common elsewhere.

All of the plants constituting Rank 1B meet the definitions of Section 1901, Chapter 10 (Native Plant Protection Act) or Sections 2062 and 2067 of the CFGC and are eligible for State listing. Rank 2 species are rare in California, but more common elsewhere. Ranks 3 and 4 contain species about which there is some concern, and are reviewed by the CDFW and maintained on watch lists.

In 2006, CNPS updated its lists to include “threat code extensions” for each list. For example, Rank 1B species would now be categorized as Rank 1B.1, Rank 1B.2, or Rank 1B.3. The threat codes are defined as follows:

- 1 is considered seriously endangered in California (over 80 percent of occurrences threatened/high degree and immediacy of threat);
- 2 is fairly endangered in California (20 percent to 80 percent of occurrences threatened); and
- 3 is not very endangered in California (less than 20 percent of occurrences threatened or no current threats known).

Under the CEQA review process, only CNPS Rank 1 and 2 species are considered, because these are the only CNPS species that meet CEQA’s definition of “rare” or “endangered.” Impacts to Rank 3 and 4 species are not regarded as significant pursuant to CEQA.

Fully Protected Birds

Fully protected birds, such as the white-tailed kite (*Elanus leucurus*) and golden eagle (*Aquila chrysaetos*), are protected under CFGC Section 3511. Additionally, birds and their nests are protected under CFGC Sections 3503, 3503.5, and 3513. The Migratory Bird Treaty Act (MBTA) of 1918 makes it unlawful to “take” (kill, harm, harass, shoot, etc.) any migratory bird listed in Title 50 of the CFR, Section 10.13, including their nests, eggs, or young. Migratory birds include geese, ducks, shorebirds, raptors, songbirds, wading birds, seabirds, and passerine birds (such as warblers, flycatchers, swallows, etc.). Fully protected birds may not be taken or possessed (i.e., kept in captivity) at any time.

Special-Status Species in Project Site Vicinity

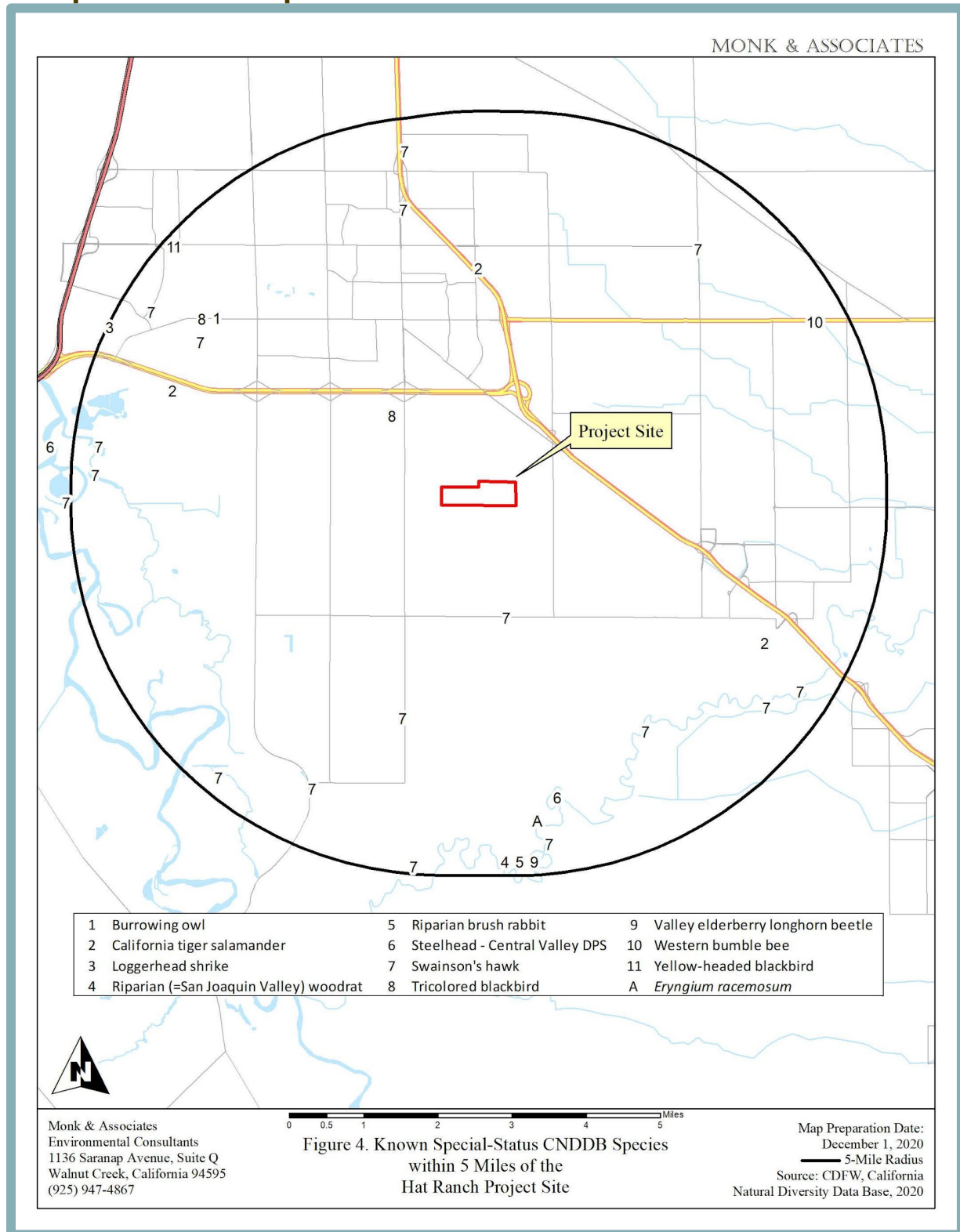
Figure 4.4-2 provides a graphical illustration of the closest known records for special-status plant and wildlife species within five miles of the project site. The following discussion presents the BRA’s assessment of special-status species with potential to occur on-site.

Special-Status Plant Species

A record search of the California Natural Diversity Database (CNDDDB) encompassing a five-mile radius around the project site returned a single record for a special-status plant species, delta button-celery (*Eryngium racemosum*). The record for the species is located approximately 4.4 miles south of the project site. However, special-status plants were not identified on or immediately adjacent to the project site. Table 4.4-1 provides further details on delta button-celery’s status, habitat, and potential for occurrence within the project site.



**Figure 4.4-2
 Special-Status Species Occurrences within a Five-Mile Radius**



**Table 4.4-1
Special-Status Species Known to Occur within a Five-Mile Radius of the Project Site**

Species	Status	Habitat	Closest Locations	Potential for Occurrence
Plants				
Delta button-celery <i>Eryngium racemosum</i>	Fed: State: CE CNPS: Rank 1B.1	Riparian scrub (vernally mesic clay depressions)	Closest record for this species is located approximately 4.4 miles south of the project site (Occurrence No. 5).	None. Riparian habitat, seasonal wetlands, or vernal pools do not occur on or adjacent to the project site. Entire site is covered with vineyard or landscaping.
Wildlife				
Insects				
Valley elderberry longhorn beetle <i>Desmocerus californicus dimorphus</i>	Fed: FT State: Other:	Riparian and other habitats with elderberries (<i>Sambucus</i> sp.). Prefers shrubs with stems one to five inches in diameter.	Closest record for this species is located approximately 4.6 miles south of the project site (Occurrence No. 45).	None. Riparian habitat or elderberry plants do not occur on or adjacent to the project site. Entire site is planted with grapes or landscaped.
Western bumble bee <i>Bombus occidentalis</i>	Fed: State: CC Other:	Primarily confined to high elevation sites and north coast. Inhabits grassland with select food plants: <i>Melilotus</i> , <i>Cirsium</i> , <i>Trifolium</i> , <i>Centaurea</i> , <i>Chrysothamnus</i> , and <i>Eriogonum</i> . Typically nests underground in abandoned rodent burrows or other cavities.	Closest record for this species is located approximately 4.7 miles northeast of the project site (Occurrence No. 235).	None. Habitat does not occur on or adjacent to the project site. Entire site is planted with grapes or landscaped.
Fish				
Steelhead – California Central Valley ESU <i>Oncorhynchus mykiss</i>	Fed: FT State: Other:	Found in Sacramento and San Joaquin Rivers and their tributaries. Migrates through the estuary to spawning grounds. Eggs are laid in small medium gravel and need a good waterflow to survive.	Closest record for this species is located approximately 4.1 miles south of the project site (Occurrence No. 20).	None. Waterways or wetlands do not occur on or adjacent to the project site. Entire site is planted with grapes or landscaped.

(Continues on next page)



**Table 4.4-1
Special-Status Species Known to Occur within a Five-Mile Radius of the Project Site**

Species	Status	Habitat	Closest Locations	Potential for Occurrence
<i>Amphibians</i>				
California tiger salamander <i>Ambystoma californiense</i>	Fed: FE State: CT Other:	Found in grassland habitats of the valleys and foothills. Requires burrows for aestivation and standing water until late spring (May) for larvae to metamorphose.	Closest record for this species is a larval sighting in a pond located approximately 4.0 miles west of the project site (Occurrence No. 37).	None. Suitable upland aestivation or open-water habitat does not occur on or adjacent to the project site. Entire site is planted with grapes or landscaped.
<i>Birds</i>				
Swainson's hawk <i>Buteo swainsoni</i>	Fed: State: CT Other:	Migratory and resident raptor that breeds in open areas with scattered trees. Prefers riparian and sparse oak woodland habitats for nesting. Requires nearby grasslands, grain fields, or alfalfa for foraging.	Closest record for this species is located approximately 1.6 miles south of the project site (Occurrence No. 2434).	None. Trees of suitable size for nesting do not occur on or adjacent to the project site. No foraging habitat – all vineyard.
Western burrowing owl <i>Athene cunicularia hypugaea</i>	Fed: State: CSC Other:	Found in open, dry annual or perennial grasslands, deserts and scrublands characterized by low-growing vegetation. Subterranean nester, dependent upon burrowing mammals, most notably, the California ground squirrel.	Closest record for this species is located approximately 4.1 miles northwest of the project site (Occurrence No. 251).	None. Suitable habitat does not occur on or adjacent to the project site. Burrows were not observed on the project site.
Loggerhead shrike <i>Lanius ludovicianus</i>	Fed: State: CSC Other:	Found in broken woodlands, shrubland, and other habitats. Prefers open country with scattered perches for hunting and fairly dense brush for nesting.	Closest record for this species is located approximately five miles northwest of the project site (Occurrence No. 112).	None. Suitable breeding habitat does not occur on the project site.
Tricolored blackbird <i>Agelaius tricolor</i>	Fed: State: CT Other:	Colonial nester in dense cattails, tules, brambles, or other dense vegetation. Requires open water, dense vegetation, and open grassy areas for foraging.	Closest record for this species is located approximately 1.5 miles northwest of the project site (Occurrence No. 100).	None. Open water or emergent marsh vegetation does not occur on or adjacent to the project site. Entire site is planted with grapes or landscaped.

(Continues on next page)



**Table 4.4-1
Special-Status Species Known to Occur within a Five-Mile Radius of the Project Site**

Species	Status	Habitat	Closest Locations	Potential for Occurrence
Yellow-headed blackbird <i>Xanthocephalus xanthocephalus</i>	Fed: State: Other: *	Nests in freshwater emergent wetlands with dense vegetation and deep water. Often along borders of lakes or ponds.	An historic (1894) record for this species is located approximately five miles west of the project site (Occurrence No. 5).	None. Open water or wetlands does not occur on or adjacent to the project site. Entire site is planted with grapes or landscaped.
Yellow warbler <i>Setophaga petechia</i>	Fed: State: CSC Other:	Found in riparian habitats with willows, cottonwoods, sycamores, and alders for nesting and foraging.	Two individuals were observed during a previous field survey in September 2013.	None. Suitable breeding habitat does not occur on the project site.
Mammals				
Riparian brush rabbit <i>Sylvilagus bachmani riparius</i>	Fed: FE State: CE Other:	Found in riparian habitats in Stanislaus County and San Joaquin County.	Closest record for this species is located approximately 4.6 miles south of the project site (Occurrence No. 2).	None. Riparian habitat does not occur on or adjacent to the project site. Entire site is planted with grapes or landscaped.
Riparian woodrat <i>Neotoma fuscipes riparia</i>	Fed: FE State: CSC Other:	Found only in riparian habitats along the San Joaquin, Stanislaus, and Tuolumne Rivers. Requires areas with a mix of trees and shrubs.	Closest record for this species is located approximately 4.6 miles south of the project site (Occurrence No. 5).	None. Riparian habitat does not occur on or adjacent to the project site. Entire site is planted with grapes or landscaped.
<p>Federal: FE - Federal Endangered FT - Federal Threatened FPE - Federal Proposed Endangered FPT - Federal Proposed Threatened FC - Federal Candidate FPD - Federally Proposed for Delisting</p> <p>State: CE - California Endangered CT - California Threatened CR - California Rare CC - California Candidate CSC - California Species of Special Concern WL - Watch List. Not protected pursuant to CEQA.</p> <p>Rank 1B.1 Seriously endangered in California (over 80 percent occurrences threatened/high degree and immediacy of threat)</p> <p>*Other - Most birds have protection under the Migratory Bird Treaty Act (MBTA). Raptors and their nests are protected by provisions of the CFGC. A few species, such as the monarch butterfly and "California Fully Protected Animals," may be protected by policies of the California Department of Fish and Wildlife.</p> <p>Source: Monk & Associates, Inc. Biological Resource Analysis, Hat Ranch Property, City of Manteca, California. December 1, 2020.</p>				



Special-Status Wildlife Species

A record search of the CNDDDB encompassing a five-mile radius around the project site returned occurrences for 11 special-status wildlife species, including valley elderberry longhorn beetle (*Desmocerus californicus dimorphus*), western bumble bee (*Bombus occidentalis*), steelhead trout (*Oncorhynchus mykiss*), California tiger salamander (*Ambystoma californiense*), Swainson's hawk (*Buteo swainsoni*), western burrowing owl (*Athene cunicularia hypugaea*), loggerhead shrike (*Lanius ludovicianus*), tricolored blackbird (*Agelaius tricolor*), yellow-headed blackbird (*Xanthocephalus xanthocephalus*), riparian brush rabbit (*Sylvilagus bachmani riparius*), and riparian woodrat (*Neotoma fuscipes riparia*). In addition, a previous field survey within the five-mile radius of the project site included the identification of yellow warbler (*Setophaga petechia*). However, the records for the species ranged from 1.5 miles to five miles from the project site. Special-status wildlife species were not identified on or adjacent to the project site. Table 4.4-1 provides further details on the aforementioned species' status, habitat, and potential for occurrence within the project site. Although not expected to be on-site, Swainson's hawk merits further discussion based on the protection the species is afforded pursuant to the CESA.

Swainson's Hawk

Swainson's hawk is a state-listed threatened species afforded protection pursuant to the CESA, Title 14. While the species does not have special federal status, Swainson's hawk is protected from direct take under the MBTA. In the Central Valley, the majority of Swainson's hawk nests and territories are associated with riparian systems, where nests are commonly found in cottonwood and oak trees. The species has also been documented nesting in eucalyptus (*Eucalyptus spp.*), black walnut (*Juglans hindsii*), black locust (*Robinia pseudoacacia*), almond (*Prunus dulcis*), Osage orange (*Maclura pomifera*), Arizona cypress (*Cupressus arizonica*), and pine (*Pinus spp.*) trees.

Foraging habitat for the species include alfalfa fields, fallow fields, beet, tomato, and other low-growing row or field crops, dry-land and irrigated pasture, and rice land, when not flooded. The Swainson's hawk generally forages in open habitats with short vegetation containing small mammals, reptiles, birds, and insects. A 2009 record for a nesting Swainson's hawk is located approximately 1.6 miles south of the project site in a eucalyptus tree surrounded by orchards (CNDDDB Occurrence No. 2434). Swainson's hawk have not been observed nesting any closer than 1.6 miles to the project site, likely because the surrounding area is agricultural and does not provide suitable nesting habitat. Raptor stick nests or signs of nesting Swainson's hawk were not observed on or nearby the project site during the BRA's site survey. The project site does not provide suitable foraging or nesting habitat for the species. The entire property outside of the existing residence and the residence's ornamental vegetation is planted with vineyards and does not provide suitable foraging habitat for large raptors (birds of prey), including the Swainson's hawk.

4.4.3 REGULATORY SETTING

A number of federal, State, and local policies provide the regulatory framework that guides the protection of biological resources. The following discussion summarizes those laws that are most relevant to biological resources in the vicinity of the project site.

Federal Regulations

The following federal environmental laws and policies are relevant to biological resources.



Federal Endangered Species Act

The United States Congress passed the FESA in 1973 to protect endangered species or species that are threatened with extinction. The FESA is intended to operate in conjunction with the National Environmental Policy Act (NEPA) to help protect the ecosystems upon which endangered and threatened species depend.

Section 9 of FESA as amended, prohibits the "take" of any fish or wildlife species listed under FESA as endangered. Under federal regulation, "take" of fish or wildlife species listed as threatened is also prohibited unless otherwise specifically authorized by regulation. "Take," as defined by FESA, means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct. "Harm" includes not only the direct taking of a species itself, but the destruction or modification of the species' habitat resulting in the potential injury of the species. As such, "harm" is further defined to mean "an act which actually kills or injures wildlife; such an act may include significant habitat modification or degradation where it actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding or sheltering" (50 CFR Section 17.3). The USFWS cannot require mitigation based on the probability that a species could use a site. Rather, the USFWS must show that the species is actually present.

Section 7(a)(2) of the FESA requires that each federal agency consult with the USFWS to ensure that any action authorized, funded or carried out by such agency is not likely to jeopardize the continued existence of an endangered or threatened species, or result in the destruction or adverse modification of critical habitat for listed species. Critical habitat designations mean (1) specific areas within a geographic region currently occupied by a listed species, on which are found those physical or biological features that are essential to the conservation of a listed species and that may require special management considerations or protection; and (2) specific areas outside the geographical area occupied by a listed species that are determined essential for the conservation of the species. The Section 7 consultation process only applies to actions taken by federal agencies that are considering authorizing discretionary projects.

For non-federal entities (e.g., private parties, cities, or counties) that are considering a discretionary permit, Section 10 provides the mechanism for obtaining take authorization. Under Section 10 of FESA, the applicant for an "incidental take permit" is required to submit a "conservation plan" to USFWS or NMFS that specifies, among other things, the impacts that are likely to result from the taking, the measures the permit applicant will undertake to minimize and mitigate such impacts, and the funding that will be available to implement those steps. Conservation plans under FESA have come to be known as "habitat conservation plans" or "HCPs" for short. The terms incidental take permit, Section 10 permit, and Section 10(a)(1)(B) permit are used interchangeably by USFWS. Section 10(a)(2)(B) of FESA provides statutory criteria that must be satisfied before an incidental take permit can be issued.

Migratory Bird Treaty Act of 1918

The MBTA (16 U.S.C. Sections 703-712) makes it unlawful to "take" (kill, harm, harass, shoot, etc.) any migratory bird listed in Title 50 of the CFR, Section 10.13, including their nests, eggs, or young. Migratory birds include geese, ducks, shorebirds, raptors, songbirds, wading birds, seabirds, and passerine birds (such as warblers, flycatchers, swallows, etc.).

Executive Order 13186 for conservation of migratory birds (January 11, 2001) requires that any project with federal involvement address impacts of federal actions on migratory birds. The order



is designed to assist federal agencies in their efforts to comply with the MBTA and does not constitute any legal authorization to take migratory birds. The order also requires federal agencies to work with the USFWS to develop a memorandum of understanding (MOU). Protocols developed under the MOU must promote the conservation of migratory bird populations through avoiding and minimizing, to the extent practicable, adverse impacts on migratory bird resources when conducting agency actions and restoring and enhancing habitat of migratory birds, as practicable, and prevent or abate the pollution or detrimental alteration of the environment for the benefit of migratory birds, as practicable.

Clean Water Act

The U.S. Army Corps of Engineers (USACE) regulates discharge of dredged or fill material into waters of the U.S. under Section 404 of the Clean Water Act (CWA). “Discharge of fill material” is defined as the addition of fill material into waters of the U.S. including, but not limited to, the following: placement of fill that is necessary for the construction of any structure or impoundment requiring rock, sand, dirt, or other material for the structure’s construction; site-development fills for recreational, industrial, commercial, residential, and other uses; causeways or road fills; and fill for intake and outfall pipes and sub-aqueous utility lines (33 CFR Section 328.2[f]). In addition, Section 401 of the CWA (Title 33, U.S. Code [USC] Section 1341) requires any applicant for a federal license or permit to conduct any activity that may result in a discharge of a pollutant into waters of the U.S. to obtain a certification that the discharge will comply with the applicable effluent limitations and water quality standards.

Waters of the U.S. include a range of wet environments such as lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, and wet meadows. Wetlands are defined as “those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support and under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions.” (33 CFR Section 328.3[b])

Furthermore, jurisdictional waters of the U.S. can be defined by exhibiting a defined bed and bank and the OHWM. The OHWM is defined by the USACE as “that line on shore established by the fluctuations of water and indicated by physical character of the soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding areas.” (33 CFR Section 328.3[e])

Jurisdictional Waters of the United States

Waters of the U.S., including wetlands, are broadly defined under 33 CFR Section 328 to include navigable waterways, tributaries of navigable waterways, and adjacent wetlands. State and federal agencies regulate these habitats, and Section 404 of the CWA requires that a permit be secured prior to the discharge of dredged or fill materials into any waters of the U.S., including wetlands. Both CDFW and the USACE have jurisdiction over modifications to riverbanks, lakes, stream channels, and other wetland features. In addition, jurisdictional waters of the U.S. could be defined by exhibiting a defined bed and bank and OHWM. The OHWM is defined by the USACE as “[...] that line on shore established by the fluctuations of water and indicated by physical character of the soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding areas.” (33 CFR Section 328.3[e])

Although definitions vary to some degree, wetlands are generally considered to be areas that are periodically or permanently inundated by surface water or groundwater, supporting vegetation



adapted to life in saturated soil. Jurisdictional wetlands are vegetated areas that meet specific vegetation, soil, and hydrologic criteria defined by the USACE Wetlands Delineation Manual (USACE, 1987). Waters of the U.S. are drainage features or water bodies as described in 33 CFR Section 328.4. The USACE holds sole authority to determine the jurisdictional status of waters of the U.S., including wetlands. Jurisdictional wetlands and waters of the U.S. include, but are not limited to, perennial and intermittent creeks and drainages, lakes, seeps, and springs; emergent marshes; riparian wetlands; and seasonal wetlands. Wetlands and waters of the U.S. provide critical habitat components, such as nest sites and a reliable source of water for a wide variety of wildlife species.

State Regulations

The following State environmental laws and policies are relevant to biological resources.

California Endangered Species Act

In 1984, the State of California enacted CESA, which is similar to the FESA but pertains to State-listed endangered and threatened species. CESA requires State agencies to consult with the CDFW when preparing CEQA documents to ensure that the actions of the lead agency do not jeopardize the existence of listed species. Lead agencies are directed by CESA to consult with CDFW on projects or actions that could affect listed species. In addition, CESA directs CDFW to determine whether jeopardy would occur, and allows CDFW to identify “reasonable and prudent alternatives” to the project consistent with conserving the species. Agencies can approve a project that affects a listed species if they determine that “overriding considerations” exist; however, the agencies are prohibited from approving projects that would result in the extinction of a listed species.

CESA prohibits the taking of State-listed endangered or threatened plant and wildlife species. The CDFW exercises authority over mitigation projects involving State-listed species, including those resulting from CEQA mitigation requirements. Taking may be authorized by CDFW if an approved habitat management plan or management agreement that avoids or compensates for possible jeopardy is implemented. In addition, CDFW requires preparation of mitigation plans in accordance with published guidelines.

California Department of Fish and Wildlife

The CDFW exercises jurisdiction over wetland and riparian resources associated with rivers, streams, and lakes under CDFW Code Section 1600 to 1607. The CDFW has the authority to regulate work that would do any one or more of the following:

- 1) Divert, obstruct, or change the natural flow of a river, stream, or lake;
- 2) Change the bed, channel, or bank of a river, stream, or lake; or
- 3) Use material from a streambed.

The CDFW asserts that the jurisdictional area along a river, stream, or creek is usually bounded by the top-of-bank or the outermost edges of riparian vegetation. Typical activities regulated by CDFW under CFGC Sections 1600 through 1607 include installing outfalls, stabilization of banks, creek restoration, implementing flood control projects, constructing river and stream crossings, diverting water, damming streams, gravel mining, logging operations, and jack-and-boring.

Careful project design, including the minimization of impacts and reduction of hard structure surface area (i.e., minimal amounts of cement or rip-rap), is critical for CDFW approval. The



CDFW emphasizes the use of biotechnical or bioengineered creek-related components (emphasis on natural materials, sometimes in conjunction with hard materials) that minimize the need for hard structures in creeks.

CDFW Species of Special Concern

Species whose numbers, reproductive success, or habitat may be threatened are tracked by CDFW in California, and are included on a list of “Species of Special Concern” developed by the CDFW. Though not formally listed under FESA or CESA, Species of Special Concern receive additional consideration during the CEQA process.

CDFW Birds of Prey Protection

Birds of prey are also protected in California under provisions of the CFGC Section 3503.5, which states, “it is unlawful to take, possess, or destroy any birds in the order Falconiformes or Strigiformes (birds of prey) or to take, possess, or destroy the nest or eggs of any such bird except as otherwise provided by this code or any regulation adopted pursuant thereto.” Construction disturbance during the breeding season could result in the incidental loss of fertile eggs or nestlings, or otherwise lead to nest abandonment. Disturbance that causes nest abandonment and/or loss of reproductive effort is considered “taking” by the CDFW.

Waters of the State

Waters of the State, including wetlands, are considered sensitive biological resources and fall under the jurisdiction of the CDFW and California’s Regional Water Quality Control Boards (RWQCBs).

The CDFW exercises jurisdiction over wetland and riparian resources associated with rivers, streams, and lakes under CFGC Section 1600 to 1616. The CDFW has the authority to regulate work that would substantially divert, obstruct, or change the natural flow of a river, stream, or lake; substantially change the bed, channel, or bank of a river, stream, or lake; or use material from a streambed. CDFW’s jurisdictional area along a river, stream or creek is usually bounded by the top-of-bank or the outermost edges of riparian vegetation. Typical activities regulated by CDFW under Section 1600-1616 authority include installing outfalls, stabilizing banks, implementing flood control projects, constructing river and stream crossings, diverting water, damming streams, gravel mining, and logging.

Regional Water Quality Control Board

Pursuant to Section 401 of the CWA and U.S. Environmental Protection Agency (USEPA) 404(b)(1) guidelines, in order for a USACE federal permit applicant to conduct any activity which may result in discharge into navigable waters, they must provide a certification from the RWQCB that such discharge will comply with the State water quality standards. The RWQCB has a policy of no-net-loss of wetlands in effect and typically requires mitigation for all impacts to wetlands before the RWQCB will issue water quality certification.

Under the Porter-Cologne Water Quality Control Act (Cal. Water Code Section 13000-14920), the RWQCB is authorized to regulate the discharge of waste that could affect the quality of the State’s waters. Therefore, even if a project does not require a federal permit (i.e., a Nationwide Permit (NWP) from the USACE), the project may still require review and approval of the RWQCB. Section 13260 requires that any person discharging waste, or proposing to discharge waste, that could affect waters of the State must file a report of discharge with the RWQCB through an application



for waste discharge. When reviewing applications, the RWQCB focuses on ensuring that projects do not adversely affect the “beneficial uses” associated with waters of the State. Generally, the RWQCB defines beneficial uses to include all of the resources, services and qualities of aquatic ecosystems and underground aquifers that benefit the State. In most cases, the RWQCB seeks to protect these beneficial uses by requiring the integration of water quality control measures into projects that will result in discharge into waters of the State. For most construction projects, RWQCB requires the use of construction and post-construction Best Management Practices (BMPs). In many cases, proper use of BMPs, including bioengineering detention ponds, grassy swales, sand filters, modified roof techniques, drains, and other features, will speed project approval from RWQCB. Development setbacks from creeks are also requested by RWQCB as they often lead to less creek-related impacts in the future.

California Native Plant Society

CNPS maintains a list of plant species native to California that has low numbers, limited distribution, or are otherwise threatened with extinction. This information is published in the Inventory of Rare and Endangered Plants of California. Potential impacts to populations of CNPS-listed plants receive consideration under CEQA review. Definitions of the CNPS listings have been described in the Existing Environmental Setting Section above.

Local Regulations

The following local environmental laws and policies are relevant to biological resources.

City of Manteca General Plan 2023

The City’s General Plan identifies the following goals and policies to provide further protection to biological resources:

Goal RC-10 Protect sensitive native vegetation and wildlife communities and habitat in Manteca.

Policy RC-P-31 Minimize impact of new development on native vegetation and wildlife.

Policy RC-P-32 Condition new development in the vicinity of the San Joaquin River and Walthall Slough to protect riparian habitat, wetlands, and other native vegetation and wildlife communities and habitats.

Policy RC-P-33 Discourage the premature removal of orchard trees in advance of development, and discourage the removal of other existing healthy mature trees, both native and introduced.

Policy RC-P-34 Protect special-status species and other species that are sensitive to human activities.

Policy RC-P-35 Allow contiguous habitat areas.

Policy RC-P-36 Consider the development of new drainage channels planted with native vegetation, which would provide habitat as well as drainage.



- Policy RC-I-32 Continue to support and comply with the requirements of the San Joaquin County Multi-Species Habitat Conservation and Open Space Plan (SJMSCP) when reviewing proposed public and private land use changes.
- Policy RC-I-33 Project proponents who opt not to participate in the SJMSCP shall:
- Satisfy applicable U.S. Endangered Species Act (ESA), California Endangered Species Act (CESA), National Environmental Policy Act (NEPA), California Environmental Quality Act (CEQA), and other applicable local, state, and federal laws and regulation provisions through consultations with the Permitting Agencies and local planning agencies.
 - Provide site-specific research and ground surveys for proposed development projects. This research must include a detailed inventory of all biological resources onsite, and appropriate mitigation measures for avoiding or reducing impact to these biological resources. This requirement may be waived if determined by the City that the proposed project area is already sufficiently surveyed.
- Policy RC-I-34 Until such time that a Clean Water Act regional general permit or its equivalent is issued for coverage under the SJMSCP, acquisition of a Section 404 permit by project proponents will continue to occur as required by existing regulations. Project proponents shall comply with all requirements for protecting federally protected wetlands.
- Policy RC-I-35 Continue to enforce the City's heritage tree ordinance which defines and identifies mature trees to be protected, and establishes regulations for their protection and removal.
- Policy RC-I-36 Limit the access of pedestrians and bicyclists to wetland areas so that access is compatible with long-term protection of these natural resources.
- Policy RC-I-37 The City shall implement multiple use of resource areas, where feasible, that includes passive recreational and educational opportunities with the protection of wildlife and vegetation habitat areas.

City of Manteca Tree Ordinance

The landscape tree protection ordinance (Chapter 17.48, Landscape Care, Maintenance and Replacement, of the Municipal Code) requires:

For landscaping for multi-family and nonresidential development, removal of trees planted as part of an approved landscape plan shall be limited to trees that are in poor health, structurally distressed, or unsafe. The removal of a tree shall be the final recourse upon determining that it is infeasible to save the tree by any other method (e.g., pruning,



treatment of diseases, fertilizing). Landscape Replacement. All plant material removed from a multi-family or nonresidential project in which the Community Development Department has approved the landscape plan shall be replaced. Replacement shrubs shall be a minimum 5-gallon size. Ground cover shall be a minimum size of a full flat.

San Joaquin County Multi-Species Habitat Conservation and Open Space Plan

The San Joaquin Council of Governments (SJCOG) adopted the SJMSCP on November 14, 2000. The Plan was prepared with the cooperation of regulatory agencies, cities, and other interested parties with the purpose of balancing the often-conflicting interests of agriculture, development, and the environment.

One of the primary goals of the SJMSCP was to obtain permits from State and federal agencies that would cover a variety of project activities over the next 50 years. This goal was partially achieved when the USFWS and the CDFW issued incidental take permits in conformance with the FESA and the CESA. The SJMSCP has a variety of mechanisms for complying with the CESA and FESA. The SJMSCP provides a mechanism for applicants to pay a fee to the SJCOG to mitigate impacts to special-status plant and animal species that could occur on a project site.

It should be noted that two agencies responsible for issuing federal permits in accordance with the CWA, USACE and the RWQCB, have not issued permits to the SJCOG and payment of fees towards the SJMSCP will not modify requirements now imposed by these two agencies.

In addition, activities affecting special-status marine species, including Chinook salmon (*Oncorhynchus tshawytscha*) and steelhead (*Oncorhynchus mykiss*), must still be permitted separately by the NMFS. Similarly, take of Delta smelt (*Hypomesus transpacificus*), and giant garter snake (*Thamnophis gigas*), and several other species protected pursuant to the FESA, are not covered by use of the SJMSCP. If the NMFS or USFWS determine the project site provides suitable habitat for giant garter snake or Delta smelt, an incidental take permit would be required from the USFWS. Similarly, those projects affecting waters of the U.S. must still be permitted by the USACE and the RWQCB.

The project site is covered by the SJMSCP. The City is a signatory to the SJMSCP, and typically requires all areas within the City limits to participate in the SJMSCP. Therefore, upon annexation of the proposed project to the City, the City would also require the project to seek coverage under the SJMSCP.

San Joaquin County's past and future (2001-2051) growth has affected and will continue to affect 97 special status plant, fish and wildlife species in 52 vegetative communities scattered throughout San Joaquin County's 1,400+ square miles and 900,000+ acres, which include 43 percent of the Sacramento-San Joaquin Delta's Primary Zone. The SJMSCP, in accordance with FESA Section 10(a)(1)(B) and CESA Section 2081(b) Incidental Take Permits, provides compensation for the Conversion of Open Space to non-Open Space uses which affect the plant, fish, and wildlife species covered by the Plan, hereinafter referred to as "SJMSCP Covered Species". In addition, the SJMSCP provides some compensation to offset the impacts of open space land conversions on non-wildlife related resources such as recreation, agriculture, scenic values and other beneficial Open Space uses.

The SJMSCP compensates for Conversions of Open Space for the following activities: urban development, mining, expansion of existing urban boundaries, non-agricultural activities occurring



outside of urban boundaries, levee maintenance undertaken by the San Joaquin Area Flood Control Agency, transportation projects, school expansions, non-federal flood control projects, new parks and trails, maintenance of existing facilities for non-federal irrigation district projects, utility installation, maintenance activities, managing Preserves, and similar public agency projects. These activities will be undertaken by both public and private individuals and agencies throughout San Joaquin County and within the County's incorporated cities of Escalon, Lodi, Manteca, Ripon, Stockton, and Tracy. Public agencies including the California Department of Transportation (Caltrans) (for transportation projects), and the SJCOG (for transportation projects) also will undertake activities which will be covered by the SJMSCP. In addition, 5,340 acres is allocated for anticipated projects (e.g., annexations, general plan amendments).

The 97 SJMSCP Covered Species include 25 State and/or federally listed species. The SJMSCP Covered Species include 27 plants (six listed), four fish (two listed), four amphibians (one listed), four reptiles (one listed), 33 birds (seven listed), 15 mammals (three listed) and 10 invertebrates (five listed).

The SJMSCP is administered by a Joint Powers Authority consisting of members of the SJCOG, the CDFW, and the USFWS. Development project applicants are given the option of participating in the SJMSCP as a way to streamline compliance with required local, State and federal laws regarding biological resources, and typically avoid having to approach each agency independently. According to the SJMSCP, adoption and implementation by local planning jurisdictions provides full compensation and mitigation for impacts to plants, fish and wildlife. Adoption and implementation of the SJMSCP also secures compliance pursuant to the State and federal laws, such as CEQA, the NEPA, the Planning and Zoning Law, the State Subdivision Map Act, the Porter-Cologne Act and the Cortese-Knox Act, in regard to species covered under the SJMSCP.

Applicants pay mitigation fees on a per-acre basis, as established by the Joint Powers Authority, according to the measures needed to mitigate impacts to the various habitat and biological resources. Different types of land require different levels of mitigation (i.e., one category requires that one acre of a similar land type be preserved for each acre developed, while another type requires that two acres be preserved for each acre developed). The entire County is mapped according to these categories so that landowners, project proponents and project reviewers are easily aware of the applicable SJMSCP fees for the proposed development.

The appropriate fees are collected by the City and remitted to SJCOG for administration. SJCOG uses the funds to preserve open space land of comparable types throughout the County, often coordinating with other private or public land trusts to purchase conservation easements or buy land outright for preservation. Development occurring on land that has been classified under the SJMSCP as "no-pay" would not be required to pay a fee. This category usually refers to already urbanized land and infill development areas.

4.4.4 IMPACTS AND MITIGATION MEASURES

The following section describes the standards of significance and methodology used to analyze and determine the proposed project's potential impacts related to biological resources. In addition, a discussion of the project's impacts, as well as mitigation measures where necessary, is also presented.



Standards of Significance

An impact is considered significant, consistent with Appendix G of CEQA Guidelines, if the proposed project would result in any of the following:

- 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 CDFW or USFWS;
- 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 CDFW or USFWS;
- 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.
- 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;
- Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance; or
- Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan (NCCP), or other approved local, regional, or State habitat conservation plan.

Method of Analysis

A BRA was prepared for the proposed project by Monk & Associates in December 2020. Prior to preparing the BRA, Monk & Associates researched the most recent version of the CNDDDB RareFind 5 application for historic and recent records of special-status plant and wildlife species known to occur in the region of the project site. Monk & Associates also searched the 2020 electronic version of the *California Native Plant Society's Inventory of Rare and Endangered Plants of California* for records of special-status plants known in the region of the project site. Monk & Associates examined all known record locations for special-status species to determine if special-status species could occur on or near the project site.

In addition to the records search, Monk & Associates conducted a general survey of the project site on September 11, 2020 to record biological resources and to assess the likelihood of agency-regulated areas on the project site. The survey involved searching all habitats on the site and recording all plant and wildlife species observed. Monk & Associates cross-referenced the habitats found on the project site against the habitat requirements of local or regionally known special-status species to determine if the proposed project could directly or indirectly impact such species.

Monk & Associates' site evaluation also included an examination of the site to determine if any areas within the project site would be subject to regulation as waters of the U.S. and/or State.

In addition to areas within the project site that could be impacted by the proposed project, areas designated for off-site improvements are also included in the analysis. The potential for biological resources impacts in off-site improvement areas were evaluated using the BRA's descriptions of properties surrounding the project site, as well as historical images provided by Google Earth Pro. Where necessary, appropriate mitigation measures are identified to address all potential impacts associated with the proposed project's off-site improvement areas.



Project-Specific Impacts and Mitigation Measures

The following discussion of impacts related to biological resources is based on implementation of the proposed project in comparison to existing conditions and the standards of significance presented above.

4.4-1 Have a substantial adverse effect, either directly (e.g., threaten to eliminate a plant or animal community) or through habitat modifications, on any plant or wildlife species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the CDFW or USFWS. Based on the analysis below and with implementation of mitigation, the impact is *less than significant*.

The following discussion presents the analysis of potential impacts associated with the proposed project's implementation to both special-status plant and wildlife species.

Special-Status Plant Species

The proposed project would not result in substantial adverse effects, either directly or through habitat modifications, on any plant species identified as a candidate, sensitive, or special-status, as analysis of the project site's potential to support such species did not yield evidence indicating the on-site presence of such species. For example, a record search of the CNDDB completed as part of the BRA's analysis did not return any occurrences for special-status plants within the footprint of the project site, off-site improvement areas, or in the areas adjacent to the project site. In fact, only a single occurrence was returned for a special-status plant within the five-mile radius surrounding the project site. Similarly, the field survey conducted as part of the BRA did not include observations of any on-site special-status plant species.

When factoring in the project site's long history of disturbance associated with agricultural practices, the likelihood of natural or native habitats existing on-site that would support special-status plants decreases even further. The special-status plant identified previously within the five-mile radius surrounding the project site, delta-button celery, requires riparian habitat, which is not available on-site. As discussed above, the existing plant communities on the project site are predominantly the vineyards planted throughout the property. Additionally, ornamental vegetation, including lawn areas, trees, shrubs, perennial plants, and vines, has been planted around the project site's existing residence. In the areas planned for off-site improvements, previous disturbance of the unpaved roadways removes any possibility of the off-site areas offering suitable habitat. Finally, as the properties adjacent to the project site have been either previously developed with residential communities or have been used historically for agricultural purposes, suitable habitat for special-status plant species would also not exist on neighboring parcels.

Altogether, the previous disturbance of the site has altered the soil profile, plant communities, and hydrology patterns. As such, areas do not exist on the project site that would be regarded as suitable for any special-status plant species. Thus, the proposed project would not impact special-status plant species, and mitigation for



potential impacts to special-status plants would not be warranted for the proposed project.

Special-Status Wildlife Species and Migratory Birds

As noted previously, 12 special-status wildlife species were identified as part of the BRA's analysis as having previously occurred within the five-mile radius encompassing the project site. However, the occurrences of the special-status wildlife species were not within the project site, and the field survey of the site did not yield any observations of special-status wildlife or suitable habitat for such species. Thus, due to the project site's history of disturbance associated with agricultural uses, natural or native habitats, such as burrows, ponds, wetlands (discussed further under Impact 4.4-3), or suitable host-plant species, do not exist within the footprint of the project site, the off-site improvement areas, or in the immediate areas of neighboring parcels to support special-status wildlife species.

Further, while interior live oaks are planted along both sides of the driveway that lead to the project site's existing residence, and the agricultural land uses adjacent to the project site's eastern and southern boundaries include trees associated with the neighboring orchards, these trees are not high-value habitat for wildlife. More specifically, the trees occur in a highly trafficked area and are, therefore, unlikely to be used by most nesting wildlife. Additionally, because most birds can typically fly out of harm's way, the proposed project would not be expected to harm adult birds. Nonetheless, nesting passerine birds may still nest in the live oaks and/or orchard trees and cannot be dismissed from further consideration, because nesting birds are susceptible to take through disturbance that harms eggs or young. Birds and their nests are protected under CFGC Sections 3503, 3503.5, and 3513. In addition, the MBTA makes it unlawful to take any migratory bird listed in Title 50 of the CFR, Section 10.13. Migratory birds include geese, ducks, shorebirds, raptors, songbirds, wading birds, seabirds, and passerine birds (such as warblers, flycatchers, swallows, etc.). Any disturbance that causes direct injury, death, nest abandonment, or forced fledging of migratory birds is restricted under the MBTA. Similarly, any removal of active nests during the breeding season or any disturbance that results in the abandonment of nestlings is considered a take of a migratory bird under the MBTA. As such, construction-related activities could result in a significant impact should birds protected by the CFGC and MBTA be nesting in the interior live oaks.

Conclusion

If project site grubbing, grading, or construction takes place during the nesting season, generally between February 1 and September 1, nesting passerine birds could be impacted by the proposed project. Because construction-related activities of the proposed project could impact nesting passerine birds, which are protected under the CFGC and MBTA, impacts related to candidate, sensitive, or special-status species could be **potentially significant**.

Mitigation Measure(s)

Implementation of the following mitigation measure would reduce the above potential impact.



- 4.4-1 *Prior to commencement of any grading activities, the Project proponent shall seek coverage under the SJMSCP to mitigate for habitat impacts to covered special-status species. Coverage involves compensation for habitat impacts on covered species through implementation of Incidental Take and Minimization Measures (ITMMs) and payment of fees for conversion of lands that may provide habitat for covered special status species. These fees are used to preserve and/or create habitat in preserves to be managed in perpetuity. Obtaining coverage for a Project includes incidental take authorization (permits) under the Endangered Species Act Section 10(a), California Fish and Game Code Section 2081, and the MBTA. Coverage under the SJMSCP would fully mitigate all habitat impacts on covered special-status species.*

Level of Significance Following Mitigation

Implementation of Mitigation Measure 4.4-1 would ensure pre-construction surveys are conducted to determine the presence or absence of nesting passerine birds within the project site and/or neighboring parcels. Contingent upon findings of the pre-construction surveys, further steps, as detailed in the mitigation, could be necessary to ensure that project implementation would not result in impacts to nesting passerine birds protected under the CFGC and MBTA. Thus, implementation of the above mitigation measure would reduce the significant environmental effects of the proposed project relating to any plant or wildlife species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the CDFW or USFWS to a *less-than-significant* level.

4.4-2 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 CDFW or USFWS. Based on the analysis below, the impact is *less than significant*.

The only habitat types present on-site are vineyard and ornamental landscaping. The vast majority of the project site is planted with grapes, with the only exception being where a large residence exists and landscape vegetation is planted. Although the 1972 U.S. Geological Survey (USGS) Manteca, California quadrangle shows a dashed blue line drainage cutting through the northwestern corner of the project site, per the BRA, evidence of the drainage does not currently exist on the project site, likely due to on- and off-site agricultural activities changing the natural drainage patterns of the project site over time. Additionally, local and regional plans have not identified riparian habitat or sensitive natural communities on the project site. Similarly, on-site riparian habitat or sensitive natural communities have not been identified by local or regional policies and regulations, the CDFW, USFWS, or through the field survey. Therefore, because the project site does not include riparian habitat or any other sensitive natural community, the proposed project's impact would be ***less than significant***.

Mitigation Measure(s)

None required.



4.4-3 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. Based on the analysis below, the impact is *less than significant*.

As defined by the CWA, wetlands are those areas that are inundated or saturated by surface or groundwater at a frequency and duration to support a prevalence of vegetation adapted for life in saturated soil conditions. Wetlands usually must possess hydrophytic vegetation (i.e., plants adapted to inundated or saturated conditions), wetland hydrology (i.e., topographic low areas, exposed water tables, stream channels), and hydric soils (i.e., soils that are periodically or permanently saturated, inundated or flooded and that exhibit properties that typically include redoximorphic chemical changes to the soil properties indicative of periodic saturation or inundation). The three parameters must be present to be regarded as a CWA-defined wetland; notably, none of the three parameters exist on-site. The vast majority of the project site is planted with grapes, with the only exception being where a large residence exists and landscape vegetation is planted. According to the 1972 USGS Manteca, California quadrangle, the project site and surrounding properties have been farmed for more than 40 years, well before the authorization of the CWA. Per the BRA, the project site does not include areas that would constitute farmed wetlands or would otherwise suggest agricultural activities converted waters of the U.S. into cropland. Similarly, areas designated for off-site improvements also do not include farmed wetlands or converted waters of the U.S., as locations for the proposed project's off-site improvements consist of unpaved roadways adjacent to neighborhood communities and agricultural land uses. As such, the proposed project's impact to protected wetlands would be *less than significant*.

Mitigation Measure(s)

None required.

4.4-4 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. Based on the analysis below, the impact is *less than significant*.

Movement corridors or landscape linkages are usually linear habitats that connect two or more habitat patches, providing assumed benefits to the species by reducing inbreeding depression and increasing the potential for recolonization of habitat patches. The project site is bounded to the north and west by residential development and to the south and east by agricultural lands. Areas designated for the proposed project's off-site improvements consist of only unpaved roadways adjacent to neighborhood communities and agricultural land uses. The only habitat types present on-site are vineyard and ornamental landscaping. Due to the disturbed nature of the project site, the site does not offer any prime habitat such as wetlands, riparian, or forest, making the potential for use of the site as a wildlife corridor or native wildlife nursery site limited. Furthermore, the surrounding properties are developed with



homesites. Because development of the proposed project would not substantially interfere with the movement of any resident or migratory fish or wildlife species or with established resident or migratory wildlife corridors, or impede the use of wildlife nursery sites, it would have a ***less-than-significant*** impact.

Mitigation Measure(s)

None required.

4.4-5 Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance. Based on the analysis below, the impact is *less than significant*.

The proposed project would not conflict with local policies or ordinances protecting biological resources, including trees. For example, the project site, consisting of a vineyard and ornamental landscaping associated with a large residence, does not support any native vegetation communities. Therefore, the proposed project would not conflict with Policy RC-P-31 of the General Plan's Resource Conservation Element. The project site is not within the vicinity of the San Joaquin River or Walthall Slough and does not feature riparian habitat or other native vegetation or wildlife habitat. As a result, the proposed project would not conflict with Policy RC-P-32. Orchard trees do not exist on the project site, and the proposed project would compensate for the potential loss of interior live oaks with on-site landscape planting. As such, the proposed project would not conflict with Policy RC-P-33.

The proposed project would additionally satisfy all requirements specified by applicable local, State, and federal laws and regulation provisions through consultations with permitting agencies and local planning agencies. As detailed in this EIR, the proposed project includes site-specific research and ground surveys, including a detailed inventory of all biological resources on-site and appropriate mitigation measures for avoiding or reducing impacts to identified biological resources.

In regard to the City's Tree Ordinance, the project site's existing trees were planted by the owner of the existing single-family residence; the trees were not planted as part of a multi-family or nonresidential development. The trees are additionally not part of an approved landscape plan for a larger development project. Therefore, according to the City's Chapter 17.48 on Landscape Care, Maintenance and Replacement, the proposed project would not be required to mitigate for the removal of the existing landscape trees.

Based on the above information, the proposed project's impact on biological resources, including trees, would be ***less than significant***.

Mitigation Measure(s)

None required.



4.4-6 Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan. Based on the analysis below and with implementation of mitigation, the impact is *less than significant*.

The project site is located within San Joaquin County and will be annexed into the City of Manteca. Both jurisdictions are covered by the SJMSCP. Implementation of the proposed project would result in the conversion of approximately 184.7 acres of existing agricultural land (and an existing residence) into residential housing, a school, and park land. Pursuant to the SJMSCP, conversion of agricultural land would be viewed by SJCOG as a loss of open space that otherwise provides support to wildlife communities in San Joaquin County. The City, along with the CDFW, the USFWS, and the SJCOG, determined that the loss of general open space lands could be detrimental to special-status species and is detrimental to open spaces that otherwise support common wildlife species.

Based on the above information, impacts related to conflicts with the provisions of an adopted HCP could be ***potentially significant***.

Mitigation Measure(s)

Implementation of the following mitigation measure would reduce the above potential impact.

4.4-6 Implement Mitigation Measure 4.4-1.

Level of Significance Following Mitigation

Implementation of Mitigation Measure 4.4-6 would ensure the project applicant pays all applicable fees for coverage under the SJMSCP. Payment of fees would mitigate the proposed project's impacts to open space lands by ensuring preservation of similar open space lands in perpetuity and ensure that the proposed project is in compliance with the SJMSCP. Thus, implementation of the above mitigation measure would reduce the significant environmental effects of the proposed project relating to conflicts with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan to a *less-than-significant* level.

Cumulative Impacts and Mitigation Measures

As defined in Section 15355 of the CEQA Guidelines, "cumulative impacts" refers to two or more individual effects which, when considered together, are considerable, compound, or increase other environmental impacts. The individual effects may be changes resulting from a single project or a number of separate projects. The cumulative impact from several projects is the change in the environment that results from the incremental impact of the project when added to other closely related past, present, and reasonably foreseeable probable future projects.

For further detail related to the cumulative setting of the proposed project, refer to Chapter 6, Statutorily Required Sections, of this EIR.



4.4-7 Cumulative loss of biological resources and the effects of ongoing urbanization in the region. Based on the analysis below, the impact is *less than significant*.

Implementation of the proposed project, in combination with other development within the project vicinity, could result in the loss of habitats that support common wildlife species in the region of the project site. Low-density residential development associated with the Pillsbury Estates, Woodward Park, and Evans Estates communities is located to the north and the west of the project site, while lands directly south and east are planted with orchards. Additionally, the City has approved approximately 1,049 acres adjacent to the project site's eastern boundary for development of the Austin Road Business Park and Residential Community (ARBPRC), which, at buildout, would include 92.9 acres of commercial uses, 275.2 acres of industrial uses, 18.2 acres of public/quasi-public uses, 30.2 acres of park land, and 33.2 acres of open space.

As discussed above, the project site contains approximately 184.7 acres of existing agricultural land. While the project site does not include riparian habitat, State or federally protected wetlands, migratory wildlife corridors, or trees protected by the City's Tree Ordinance, interior live oaks planted along both sides of the driveway that lead to the project site's existing residence could host nesting passerine birds. Additionally, the proposed project's conversion of agricultural land into residential housing, a school, and park land would result in the loss of habitat. However, as discussed under Impact 4.4-1 above, compliance with applicable provisions of the SJMSCP would be required through incorporation of Mitigation Measure 4.4-1, which would ensure all potential biological and land conversion impacts are mitigated to a less-than-significant level. In addition, as demonstrated above, the project site does not include riparian habitat or any other sensitive natural community, nor does the site contain State- or federally protected wetlands. Furthermore, the project site does not offer habitat that would serve as a wildlife corridor, as the only habitat types present on-site are vineyard and ornamental landscaping, making the potential for use of the site as a wildlife corridor or native wildlife nursery site limited. Finally, while future development of land surrounding the project site would result in the loss of agricultural land, such areas, due to their current uses, would offer similar habitat value as the project site, indicating that the majority of agricultural land in the project vicinity does not include riparian habitat, State or federally protected wetlands, or migratory wildlife corridors, and future projects in the project vicinity would be required to analyze all environmental issue areas as required under CEQA and mitigate impacts pursuant to the SJMSCP.

Based on the foregoing discussion, implementation of the proposed project, in combination with other development within the project vicinity, would result in a ***less-than-significant*** cumulative impact to biological resources.

Mitigation Measure(s)
None required.



4.5 CULTURAL AND TRIBAL CULTURAL RESOURCES

4.5 CULTURAL AND TRIBAL CULTURAL RESOURCES

4.5.1 INTRODUCTION

This chapter of the Draft EIR describes cultural resources and tribal cultural resources known to be located within the Hat Ranch (proposed project) area. Cultural resources can be categorized into prehistoric or historic resources. Prehistoric resources are those sites and artifacts associated with indigenous, non-Euroamerican populations, generally prior to contact with people of European descent. Historical resources include structures, features, artifacts, and sites that date from Euroamerican settlement of the region. The extent to which development of the proposed project could remove, damage, or destroy existing cultural resources is evaluated in this chapter. Comments on cultural or tribal resources were not provided during the Notice of Preparation (NOP) comment period. Information presented in this chapter is taken from the City of Manteca General Plan,¹ the City of Manteca General Plan EIR,² and A Cultural Resources Survey for the South of Woodward Avenue South - Hat Ranch, Manteca, San Joaquin County, California (See Appendix E), prepared by Tom Origer & Associates, Inc.³

In response to the Notice of Preparation (NOP), the City received comments related to cultural and tribal cultural resources regarding appropriate analysis of cultural and tribal cultural resources, consultation with California Native American tribes that are traditionally and culturally affiliated with the project area, and demolition of the on-site 20,000-square-foot (sf) residence. The comments have been carefully reviewed and considered by the City of Manteca and are reflected in the analysis of impacts in this chapter.

4.5.2 EXISTING ENVIRONMENTAL SETTING

The following environmental setting discussion for the proposed project consists of the prehistoric context, historic context, and a description of the project area.

Prehistoric Context

Prehistoric context can include paleontological and archeological resources. Paleontological resources include fossils and trace fossils of prehistoric life (i.e., dinosaur bones). Archeological resources include human activity. The prehistory of the Manteca area is based on the archaeology of the greater Sacramento Delta region. The earliest known culture dating back to the Middle Archaic of 3000 B.C. was that of hunter-gatherers who buried their dead on clay knolls above the floodplains. The villages of these early settlers were located along the Central Valley's creeks, rivers, and delta. The Bear Creek site, located in Stockton, is one example of a Middle Archaic site, which was excavated by archaeologists in the early 1960s.

Between 2000 and 500 B.C., Utian-speaking populations appear to have occupied the Sacramento Delta, the areas along rivers and streams, marshlands, as well as the hills on both the east and west sides of the Sacramento Valley. Expansion westward into the San Francisco

¹ City of Manteca. *Manteca General Plan 2023 Policy Document*. October 6, 2003.

² City of Manteca. *City of Manteca General Plan 2023 Environmental Impact Report*. Certified October 6, 2003.

³ Tom Origer & Associates, Inc. *A Cultural Resources Survey for South of Woodward Avenue South – Hat Ranch, Manteca, San Joaquin County, California*. October 14, 2013.



Bay Area seems to have brought about some type of fusion between the bearers of Utian languages and the resident speakers of Hokan and Yukian languages. A relatively rapid climatic shift after 400 A.D. coincided with dramatic changes in prehistoric California cultures. During this period, ancestral Yokuts-speaking people, members of the Utian language family, probably abandoned foothill areas and congregated at villages near delta waterways. Relatively cool and moist climatic conditions from 1450 to 1850 A.D. coincided with population growth and florescence of native cultures. By the 1600s and 1700s, Yokuts-speaking people inhabited nearly the entire San Joaquin Valley.

Manteca lies between the historic territory of the Chulamni and Lakisamne Yokuts tribelets. Unfortunately, little is known with respect to ethnography and archaeology in the northern San Joaquin Valley. Because the native people were decimated by disease, missionization, and effects of the Gold Rush, it was too late for anthropologists to gather much information from the native people themselves.

Nonetheless, scholars have characterized the core of the Northern Valley Yokuts' homeland as the San Joaquin River, with its maze of channels and sloughs. Yokuts villages consisted of dwellings oval in shape, constructed of light poles pulled together at the top, and covered with tule mats. Earth-covered "sweat houses" and earth-covered ceremonial lodges were also constructed in the villages. Salmon and acorns figured prominently in the Yokuts diet, as noted in archaeological excavations at Yokuts village sites. Fish of all kinds were taken by nets and by harpoons. Yokuts fished from boats made of bundled tules. The Yokuts people also hunted waterfowl. Scholars suggest that although elk and antelope were abundant, Northern Valley Yokuts seem to have focused on smaller game, and gathered acorns, tule roots and other wild crops.

Historic Context

The first Europeans to arrive in the area, in 1769, were deserters from the Spanish military. In 1813, Spanish Franciscan friars, accompanied by soldiers, entered the San Joaquin Valley to round up the deserters, convert the Native Americans to Catholicism, and search for suitable mission sites. Although the Yokuts at first coexisted with the Europeans, they were eventually exploited by the newcomers and fought with the settlers. Two notable conflicts took place on the banks of the Stanislaus River, about one and one-half miles upstream from its confluence with the San Joaquin River. In the first battle on May 5, 1829, the combined Spanish forces from San Jose and San Francisco were defeated by the Indians, led by Chief Estanislao. The Spanish later named the Stanislaus River after the Indian chief. General Vallejo returned to the area and on May 19, 1829, defeated the Yokuts, inflicting great losses.

In 1832, Colonel Warner, a member of a trapping expedition, reported finding numerous Indian villages along the San Joaquin River. Upon his return, he found the villages greatly depopulated due to a smallpox epidemic. Disease, war, and the displacement of Indians from their original hunting and fishing grounds had brought them to virtual extinction.

Euro-American settlements in California increased sharply with the Gold Rush of 1848. French Camp, located approximately two miles north of the study area, was one of these first settlements and is one of the oldest existing settlements in San Joaquin County. French Camp was the terminus of the Oregon-California Trail used by French Canadian trappers employed by the Hudson Bay Company from about 1832-1845. On January 14, 1844, the Governor of California



issued a land grant to Charles Weber and William Gulnac. The grant included French Camp and present-day Stockton.

The first structures, including a public house, store, and adobe structure, were erected in French Camp in August 1849. French Camp grew rapidly between 1851 and 1853 as French Camp Road was the only passable all-weather route for thousands of miners working in the Mother Lode. By 1854, a post office was established. As roads between Stockton and the Mother Lode improved, business in French Camp declined.

In addition to the discovery of gold in 1848 and the start of the Gold Rush in 1849, American annexation of California in 1846 and California statehood in 1850 contributed to the transformation of the Manteca area. Many gold seekers of 1850 turned their attention to the soil when they realized gold would not earn them a living. Ranchers who remained prominent in local agriculture for decades – John McMullin, Cutler Salmon, James Reynolds, Peter Clapp, George and Orseamis Sperry, and Joshua Cowell – were all well established by the mid-1860s.

The major outside influence on the area changed from gold mining in the Sierra Foothills, which slowed in the 1860s, to the railroad, which arrived in the 1870s. Lathrop, at the junction of two rail lines heading to Stockton, replaced French Camp as the Manteca area's major town. Manteca did not yet exist, although the railroad set up a flag stop, Powell's Station, at the present location of downtown. Community life within Manteca's present City limits focused on the corner of Louise Avenue and Union Road. The East Union School was moved there in 1857. A new school building, constructed in 1865, had a second floor for church services and public events.

A cemetery was established on another corner in 1872, and a church was constructed on a third corner in 1885. The economy of Manteca was tied to the vast international grain combine. When prices collapsed in the 1890s, the entire country descended into a severe economic depression. To stay in business, local ranchers promoted irrigation for their farmland, which allowed more intense and more profitable use of the land. In 1909, the South San Joaquin Irrigation District was formed. The district delivered its first water in 1913.

Another agricultural development of the period was deeper land cultivation, which led to a widespread cultivation of watermelons on local ranches. Cowell's Station, at first just an unwheeled boxcar, became the shipping point for local produce. It offered a convenient place at the junction of two wagon roads. In 1896, a skimming station for raw milk was added. Additional enterprises followed. Soon, the Southern Pacific acknowledged the growing commercial activity by giving its station a more formal name, "Manteca," and replaced the boxcar with a small building.

Between 1905 and 1911, Manteca's downtown was the site for its first brick building, a winery, followed by its first telephone exchange, a post office and a hotel. A board of trade was set up in 1909. In 1910, a branch library and the town's first lumberyard were opened.

In 1914, the Manteca Canning Company was founded and a large plant for dairy products opened. In the next few years, three more canneries went into operation. In 1916, the Board of Trade succeeded in bringing a Spreckels sugar factory to town. The new plant, complete with office buildings, a clubhouse, landscaped grounds, and housing, opened in 1918. The City of Manteca was incorporated on May 28, 1918.



Project Area Description

The project site consists of three parcels totaling approximately 184.7 acres of relatively flat, agricultural land, located in a currently unincorporated area of San Joaquin County, southeast of the City of Manteca limits, south of State Route (SR) 120 and west of SR 99 (see Figure 3-1 in the Project Description chapter of this EIR). Currently, the site is planted with vineyards and contains a large barn, an office structure, a tree-lined driveway, and a 20,000-sf residence with two large shop buildings. County records indicate that the existing residence was constructed in 1995. Aerial photos suggest the garages were built around or after this time as well.

Soils within the study area consist of the Delhi and Tinnin series soils. Delhi and Tinnin soils are used primarily for irrigated crops, orchards, or vineyards, but have also been used for irrigated pasture and home sites. The project area primarily has moderately well-drained soils that probably once supported a variety of plants that could have served as food and cover for animals. The presence of these attributes suggests that the study area would have been suitable to prehistoric occupants as a place to gather resources and hunt.

A Cultural Resources Survey was prepared for the proposed project site, which included archival research, field inspection of the project location, and contact with the Native American community. Archival research found that the project area had not been subject to a prior cultural resources survey. The study parcel has been subject to two overview studies, but these did not incorporate fieldwork into their study. Cultural resources have not been found within a one-mile radius of the project area that could extend into the project site. In addition, ethnographic sites have not been reported in the vicinity. A house is shown on the 1952 topographic quadrangle in the far southeastern corner of the study location near Sedan Avenue, but is not currently present. During the field survey, fragments of glass and ceramic were found in the southeastern corner of the project site; however, these specimens were widely dispersed and are not considered an archaeological site. Prehistoric or historic-era archaeological sites were not found within the study area.

4.5.3 REGULATORY SETTING

Federal, State, and local governments have developed laws and regulations designed to protect significant cultural resources that may be affected by actions that they undertake or regulate. The National Historic Preservation Act (NHPA) and the California Environmental Quality Act (CEQA) are the basic federal and State laws governing preservation of historic and archaeological resources of national, regional, State, and local significance.

Federal Regulations

The following federal environmental law is relevant to cultural resources.

National Historic Preservation Act (NHPA) of 1966 (Section 106)

Federal regulations for cultural resources are governed primarily by Section 106 of the NHPA of 1966. Section 106 requires Federal agencies to take into account the effects of their undertakings on historic properties and affords the Advisory Council on Historic Preservation a reasonable opportunity to comment on such undertakings. The Council's implementing regulations, "Protection of Historic Properties," are found in 36 Code of Federal Regulations (CFR) Part 800. The goal of the Section 106 review process is to offer a measure of protection to sites, which are determined eligible for listing on the National Register of Historic Places (NRHP). The criteria for determining NRHP eligibility are found in 36 CFR Part 60. Amendments to the Act (1986 and 1992) and subsequent revisions to the implementing regulations have, among other things,



strengthened the provisions for Native American consultation and participation in the Section 106 review process. While federal agencies must follow federal regulations, most projects by private developers and landowners do not require this level of compliance. Federal regulations only come into play in the private sector if a project requires a federal permit or if it uses federal funding.

State Regulations

The following State environmental laws and policies are relevant to archaeological, historical, cultural and tribal cultural resources.

California Environmental Quality Act

State historic preservation regulations affecting this project include the statutes and guidelines contained in the California Environmental Quality Act (CEQA; Public Resources Code [PRC] Sections 21083.2 and 21084.1 and Sections 15064.5 and 15126.4 (b) of the CEQA Guidelines). CEQA requires lead agencies to carefully consider the potential effects of a project on historical resources. “Historical resources” include, but are not limited to, any object, building, structure, site, area, place, record, or manuscript that is historically or archaeologically significant (PRC Section 5020.1). Section 15064.5 of the CEQA Guidelines specifies criteria for evaluating the importance of archaeological and historical resources. A historic resource includes a resource listed in, or determined to be eligible by the State Historical Resources Commission, for listing in the California Register of Historical Resources; a resource included in a local register of historical resources; or any object, building, structure, site, area, place, record, or manuscript, which is deemed to be historically significant, including:

- The resource is associated with events that have made a significant contribution to the broad patterns of California history;
- The resource is associated with the lives of important persons from our past;
- The resource 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; or
- The resource has yielded, or may be likely to yield, important information in prehistory or history.

CEQA also applies to effects on archaeological sites. (CEQA Guidelines Section 15064.5(c).) If an archaeological resource is neither a unique archaeological nor a historical resource, the effects of a project on those resources are not considered a significant effect on the environment. (PRC Section 21083.2.)

Advice on procedures to identify such resources, evaluate their importance, and estimate potential effects is given in several agency publications, such as the series produced by the Governor’s Office of Planning and Research (OPR).⁴ The technical advice series produced by OPR strongly recommends that Native American concerns and the concerns of other interested persons and corporate entities, including, but not limited to, museums, historical commissions, associations, and societies be solicited as part of the process of cultural resources inventory.

California Health and Safety Code Sections 7050.5 and 7052

California Health and Safety Code Section 7050.5 requires that construction or excavation be stopped in the vicinity of discovered human remains until the county coroner can determine

⁴ State of California, Governor’s Office of Planning and Research. *CEQA and Archaeological Resources*. April 1994.



whether the remains are those of a Native American. If determined to be Native American, the coroner must contact the Native American Heritage Commission (NAHC). Section 7052 of the Health and Safety Code states that the disturbance of Native American cemeteries is a felony.

Public Resources Code Section 5097

PRC Section 5097 sets forth the procedures to be followed in event of unexpected discovery of human remains on nonfederal land. The disposition of Native American burial falls within the jurisdiction of the NAHC.

California Register of Historical Resources

The California Register is an authoritative listing and guide to be used by State and local agencies, private groups, and citizens in identifying the existing historical resources of the State and to indicate which resources deserve to be protected, to the extent prudent and feasible, from substantial and adverse change (PRC Section 5024.1[a]). The criteria for eligibility for the California Register are based upon National Register criteria (PRC Section 5024.1[b]). Certain resources are determined by the State to be automatically included in the California Register, including California properties formally determined eligible for, or listed in, the National Register.

Similar to the National Register, to be eligible for the California Register, a cultural resource must be significant at the local, State, and/or federal level under one or more of the following four criteria:

1. Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;
2. Is associated with the lives of persons important to the past;
3. 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; or
4. Has yielded, or may be likely to yield, information important in prehistory or history.

A resource eligible for the California Register must be of sufficient age (over 50 years), and retain enough of its historic character or appearance (integrity) to convey the reason for its significance. Additionally, the California Register consists of resources that are listed automatically and those that must be nominated through an application and public hearing process. The California Register automatically includes the following resources:

- California properties listed on the National Register and those formally determined eligible for the National Register; and
- California Registered Historical Landmarks from No. 770 onward; and
- Those California Points of Historical Interest that have been evaluated by the Office of Historic Preservation and have been recommended to the State Historical Resources Commission for inclusion on the California Register.

Senate Bill 18

Senate Bill (SB) 18 requires cities and counties to notify and consult with California Native American tribes about proposed local land use planning decisions for the purpose of protecting tribal cultural resources. SB 18 applies to the adoption or substantial amendment of general plans and specific plans, and requires that the lead agency consult with California Native American



tribes that are on the NAHC contact list and have traditional lands located within the agency's jurisdiction.

Assembly Bill 52

Assembly Bill (AB) 52 adds tribal cultural resources to the categories of cultural resources in CEQA, which had formerly been limited to historic, archaeological, and paleontological resources. "Tribal cultural resources" are defined as either:

- (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.
- (2) 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 Section 5024.1. In applying the criteria set forth in subdivision (c) of Section 5024.1 for the purposes of this paragraph, the lead agency shall consider the significance of the resource to a California Native American tribe.

Under AB 52, a project that may cause a substantial adverse change in the significance of a tribal cultural resource is defined as a project that may have a significant effect on the environment. Where a project may have a significant impact on a tribal cultural resource, the lead agency's environmental document must discuss the impact and whether feasible alternatives or mitigation measures could avoid or substantially lessen the impact. PRC Section 21080.3.1 requires lead agencies to provide notice to tribes that are traditionally and culturally affiliated with the geographic area of a proposed project if they have requested notice of projects proposed within that area. If the tribe(s) request(s) consultation within 30 days upon receipt of the notice, the lead agency must consult with the tribe(s). Consultation may include discussing the type of environmental review necessary, the significance of tribal cultural resources, the significance of the project's impacts on the tribal cultural resources, and alternatives and mitigation measures recommended by the tribe(s).

Local Regulations

The following local environmental laws and policies are relevant to cultural and tribal cultural resources.

Manteca General Plan 2023

The Manteca General Plan identifies the following goals and policies to provide further protection to cultural and historical resources:

Goal RC-11 Preserve and enhance Manteca's archaeological and historic resources for their aesthetic, educational and cultural values.

Goal RC-12 Protect Manteca's Native American heritage.

Policy RC-P-37 The City shall not knowingly approve any public or private project that may adversely affect an archaeological site without consulting the California Archaeological Inventory at



Stanislaus State University, conducting a site evaluation as may be indicated, and attempting to mitigate any adverse impacts according to the recommendation of a qualified archaeologist. City implementation of this policy shall be guided by the California Environmental Quality Act (CEQA) and the National Historic Preservation Act (NHPA).

Policy RC-P-38

The City shall require that the proponent of any development proposal in an area with potential archaeological resources, and specifically near the San Joaquin River and Walthall Slough, and on the eastside of State Highway 99 at the Louise Avenue crossing, shall consult with the California Archaeological Inventory, Stanislaus State University to determine the potential for discovery of cultural resources, conduct a site evaluation as may be indicated, and mitigate any adverse impacts according to the recommendation of a qualified archaeologist. The survey and mitigation shall be developer funded.

4.5.4 IMPACTS AND MITIGATION MEASURES

The following section describes the standards of significance and methodology used to analyze and determine the proposed project's potential impacts related to cultural and tribal cultural resources. In addition, a discussion of the project's impacts, as well as mitigation measures where necessary, is also presented.

Standards of Significance

An impact is considered significant, consistent with Appendix G of CEQA Guidelines, if the proposed project would:

- Cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5;
- Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5;
- Disturb any human remains, including those interred outside of formal cemeteries; or
- Cause a substantial adverse change in the significance of a tribal cultural resource as defined in PRC 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:
 - Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in PRC section 5020.1(k); or
 - 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 PRC Section 5024.1. In applying the criteria set forth in subdivision (c) of PRC Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.



Method of Analysis

The following subsections describe the methods of analysis upon which this chapter is based. The analysis presented within this chapter of potential impacts to cultural and tribal cultural resources is based primarily on the Cultural Resources Survey prepared for the proposed project by Tom Origer & Associates. Additionally, the City's compliance with SB 18 and AB 52 and a search request of the NAHC's Sacred Lands File are detailed below.

Cultural Resources Survey Methodology

The Cultural Resources Survey consisted of archival research, field inspection of the project site, and contact with the Native American community. Archival research included a review of the archaeological site base maps and records, survey reports, and other materials on file at the Central California Information Center at California State University, Stanislaus, as well as examination of the library and files at Tom Origer & Associates. Sources of information included, but were not limited to, the current listings of properties on the National Register of Historic Places (National Register), California Historical Landmarks, California Register of Historical Resources (California Register), and California Points of Historical Interest, as listed in the Office of Historic Preservation's *Historic Property Directory*. Maps ranged from hand-drawn maps of the 1800s (e.g., GLO plats) to topographic maps issued by the United States Geological Survey (USGS) and the U.S. Army Corps of Engineers (USACE) from the early to the middle 20th century. In addition, ethnographic literature that describes appropriate Native American groups, county histories, and other primary and secondary sources were reviewed.

The field survey of the project site was conducted in transects 30 meters or less apart, with a zig-zag pattern employed, where possible, to assure complete coverage.

Finally, as part of the Cultural Resources Survey, the NAHC and Katherine Erolinda Perez of the North Valley Yokuts Tribe were contacted. A response was received by the NAHC, which stated that the Sacred Lands File did not return results for identified resources within the project site. A response was not received from Katherine Erolinda Perez.

Assembly Bill 52

AB 52 (PRC 21080.3.1) requires lead agencies to provide notice to tribes that are traditionally and culturally affiliated with the geographic area of a proposed project if they have requested notice of projects proposed within that area. If the tribe(s) requests consultation within 30 days upon receipt of the notice, the lead agency must consult with the tribe(s). While tribes had not requested notice of projects in the project area, the City provided notice on March 15, 2021 to multiple representatives of the North Valley Yokuts Tribe, as well as a representative of the Confederated Villages of Lisjan. The City did not receive requests for consultation from the tribes.

Native American Heritage Commission Consultation

An additional request was sent to the NAHC on March 17, 2021 by Raney Planning & Management, Inc. for a search of the Sacred Lands File to identify any known tribal cultural resources within the project site. The results were returned on April 14, 2021, which were negative.

Project-Specific Impacts and Mitigation Measures

The following discussion of impacts related to cultural and tribal cultural resources is based on implementation of the proposed project in comparison to existing conditions and the standards of significance presented above.



4.5-1 Cause a substantial adverse change in the significance of a historic architectural resource pursuant to Section 15064.5. Based on the analysis below, the impact is considered *less than significant*.

A significant impact could occur if demolition of the on-site residence or project construction or operation would result in a substantial adverse change in the significance of historic architectural resources that are either listed or eligible for listing on the National Register or California Register. A substantial adverse change is defined as the demolition, relocation, or alteration of a resource, to the extent that the character-defining features which convey its significance would be lost. The project site is currently improved with vineyards, two shop buildings, and a 20,000-sf residence, all of which are proposed to be removed and/or demolished as part of the proposed project. A residential subdivision with up to 738 homes, a school site, and two parks is proposed for the site.

According to the Cultural Resources Survey, historical resources were not found on-site during the field survey. In addition, none of the structures on-site are listed on the National Register or California Register. The survey indicates the structures on the project site do not have distinctive architectural qualities and that they would not meet the criteria for inclusion on the California Register of Historical Resources. Furthermore, the existing structures on the project site were not constructed more than 45 years ago. County records indicate that the on-site residence was constructed in 1995. Aerial photos suggest that the two shop buildings were built around or after the same time, as well. As such, the existing structures would not be considered a potentially important architectural historic resource by the Office of Historic Preservation. Therefore, the proposed project's impact related to the potential destruction of historical resources would be *less than significant*.

Mitigation Measure(s)

None required.

4.5-2 Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5 or disturb any human remains, including those interred outside of formal cemeteries. Based on the analysis below and with implementation of mitigation, the impact is considered *less than significant*.

According to the Cultural Resources Survey, archaeological resources were not found within the study area. Historical materials in the project area were too few and too widely scattered to consider the project site an archaeological site and discrete features were not found. Furthermore, review of the archaeological site base maps and records, survey reports, and other materials on file at the Central California Information Center indicated prehistoric cultural resources have not been recorded within the project site. However, the project site has been subject to agricultural operations that could have obscured surface cultural deposits that might have



otherwise been present. As discussed above, the project area would have been suitable to prehistoric occupants as a place to gather resources and hunt. Thus, excavation and grading during project construction could unearth previously unknown resources. Therefore, implementation of the proposed project could cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5 or disturb human remains, and the impact would be **potentially significant**.

Mitigation Measures(s)

Implementation of the following mitigation measures would reduce the above potential impact.

- 4.5-2(a) *If potentially significant archaeological resources are encountered during subsurface excavation activities, all construction activities within a 100-foot radius of the resource shall cease until a qualified archaeologist determines whether the resource requires further study. The City shall require that the applicant include a standard inadvertent discovery clause in every construction contract to inform contractors of this requirement. Any previously undiscovered resources found during construction shall be recorded on appropriate Department of Parks and Recreation forms and evaluated for significance in terms of California Environmental Quality Act criteria by a qualified archaeologist. Potentially significant cultural resources consist of but are not limited to stone, bone, fossils, wood, or shell artifacts or features, including hearths, structural remains, or historic dump sites. If the resource is determined to be significant under CEQA, the City and a qualified archaeologist shall determine whether preservation in place is feasible. Such preservation in place is the preferred mitigation. If such preservation is infeasible, the qualified archaeologist shall prepare and implement a research design and archaeological data recovery plan for the resource. The archaeologist shall also conduct appropriate technical analyses, prepare a comprehensive written report and file it with the appropriate information center (California Historical Resources Information System), and provide for the permanent curation of the recovered materials.*
- 4.5-2(b) *If previously unknown human remains are encountered during construction activities, Section 7050.5 of the California Health and Safety Code applies, and the following procedures shall be followed: In the event of an accidental discovery or recognition of any human remains, Public Resource Code Section 5097.98 must be followed. Once project-related ground disturbance begins and if there is accidental discovery of human remains, the following steps shall be taken:*
- *There shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent human remains until the San Joaquin County Coroner's Office is contacted to determine if the remains are Native American*



and if an investigation into cause of death is required. If the coroner determines the remains are Native American, the coroner shall contact the NAHC within 24 hours, and the NAHC shall identify the person or persons it believes to be the “most likely descendant” of the deceased Native American. The most likely descendant may make recommendations to the landowner or the person responsible for the excavation work, for means of treating or disposing of, with appropriate dignity, the human remains and any associated grave goods as provided in Public Resources Code Section 5097.98.

Level of Significance Following Mitigation

Implementation of Mitigation Measures 4.5-2(a) and (b) would ensure that a substantial adverse change in archaeological resources or human remains would not occur should any such resources be encountered during excavation and grading activities associated with the proposed project. Should unknown resources be discovered, the mitigation measures ensure adequate treatment of such resources. Thus, implementation of the above mitigation measures would reduce the potential impact to a *less-than-significant* level.

4.5-3 Cause a substantial adverse change in the significance of a Tribal Cultural Resource as defined in PRC, Section 21074, 5020.1 or 5024. Based on the analysis below and with implementation of mitigation, the impact is *less than significant*.

The project site does not contain surface-level tribal cultural historical or prehistoric resources, as determined by records searches and a field survey of the project site. The City provided notice of the proposed project on March 15, 2021 to multiple representatives of the North Valley Yokuts Tribe as well as a representative of the Confederated Villages of Lisjan. The notices opened a 30-day period as required by AB 52 for tribes to respond to the City’s notices with requests for consultation. Notably, the City did not receive requests for consultation from tribes. Additionally, search results requested as part of the Cultural Resources Survey of the NAHC Sacred Lands File were negative, indicating that the project site does not include any known tribal cultural resources. A subsequent search request of the Sacred Lands File returned negative results on April 14, 2021, further indicating that surface-level Tribal Cultural Resources do not exist on-site. However, just as the previous agricultural operations on the project site could have obscured cultural deposits that might have otherwise been present, the same would hold true for Tribal Cultural Resource deposits. As discussed above, the project area would have been suitable to prehistoric occupants as a place to gather resources and hunt. Thus, excavation and grading during project construction could unearth previously unknown tribal cultural resources. Therefore, the proposed project could cause a substantial adverse change in the significance of a Tribal Cultural Resource as defined in PRC Section 21074, or Section 5024 and the impact would be ***potentially significant***.



Mitigation Measures(s)

Implementation of the following mitigation measures would reduce the above impact.

4.5-3 *Implement Mitigation Measures 4.5-2(a) and 4.5-2(b).*

Level of Significance Following Mitigation

Implementation of Mitigation Measure 4.5-3 would ensure that a substantial adverse change in the significance of a Tribal Cultural Resource would not occur should any such resources be encountered during excavation and grading activities associated with the proposed project. Should unknown resources be discovered, the mitigation measures ensure adequate treatment of such resources. Thus, implementation of the above mitigation measures would reduce the potential impact to a *less-than-significant* level.

Cumulative Impacts and Mitigation Measures

The following discussion of impacts is based on the implementation of the proposed project in combination with other proposed and pending projects in the region.

4.5-4 Contribute incrementally in conjunction with cumulative development in the City of Manteca and its sphere of influence to the regional loss of tribal cultural, historical, and/or archeological resources in San Joaquin County. Based on the analysis below and with implementation of mitigation, the project's impact would be *less than significant*.

With development activities' ability to damage and destroy both prehistoric and historical sites and features – of which in many cases, before the information inherent in them can be reviewed, recorded, and interpreted – the importance of ascertaining the presence of cultural resources within a location remains crucial, because cultural resources are both unique and irreplaceable. Specifically, the archaeology of prehistoric and historical resources in their original context is essential in developing an understanding of the social, economic, and technological character of the era from which the resources originate.

As noted above in Impacts 4.5-1, 4.5-2, and 4.5-3, the potential exists for unknown subsurface prehistoric, historic, tribal, and/or archeological cultural resources to be unearthed during site excavation and grading. As such, the proposed project along with other development in the City could damage or destroy cultural resources particular to that area.

According to the Manteca General Plan EIR, with implementation of Manteca General Plan goals and policies related to the protection of cultural resources, impacts to cultural resources resulting from buildout of the Manteca General Plan would be less-than-significant. For example, Policy RC-P-37 in the Manteca General Plan requires the City to not knowingly approve any public or private project that could adversely affect an archaeological site without consulting the California Archaeological Inventory at Stanislaus State University, conducting a site evaluation as may be indicated, and attempting to mitigate any adverse impacts according to the recommendation of a



qualified archaeologist. City implementation of this policy shall be guided by CEQA and the NHPA. The proposed project complies with General Plan Policy RC-P-37 in that the California Archaeological Inventory at Stanislaus State was consulted and a site evaluation performed by a qualified archaeologist. Future developments would also be required to adhere to the Manteca General Plan goals and policies to protect archaeological resources.

The Cultural Resources Survey conducted by Tom Origer & Associates, Inc. did not find any recorded prehistoric or archaeological deposits in the area researched; however, buildout of the proposed project could potentially contribute to cumulative impacts related to historical or prehistoric resources if previously unidentified cultural resources are discovered during construction and damaged. Therefore, cumulative impacts associated with implementation of the proposed project could be ***potentially significant***.

Mitigation Measure(s)

Implementation of the following mitigation measure would reduce the above impact.

4.5-4 *Implement Mitigation Measures 4.5-2(a) and 4.5-2(b).*

Level of Significance Following Mitigation

Implementation of Mitigation Measure 4.5-4 would ensure that the proposed project, in conjunction with cumulative development in the City of Manteca, would not contribute to the regional loss of cultural or Tribal Cultural Resources. Should unknown resources be discovered, the mitigation measures ensure adequate treatment of such resources. Thus, implementation of the above mitigation measures would reduce the potential cumulative impact to a *less-than-significant* level.



4.6 GEOLOGY, SOILS, AND MINERAL RESOURCES

4.6 GEOLOGY, SOILS, AND MINERAL RESOURCES

4.6.1 INTRODUCTION

This chapter of the EIR describes the geologic and soil characteristics of the project site and evaluates the extent to which implementation of the proposed project could be affected by seismic hazards such as ground shaking, liquefaction, and expansive soil characteristics, as well as paleontological resources and mineral resources. Notably, the possible presence of hazardous materials or waste and groundwater contamination are discussed in the Hazards and Hazardous Materials chapter of this EIR. Comments were not received during the public comment period on the Notice of Preparation (NOP) for this EIR regarding geology, soils, seismicity, paleontological resources, or mineral resources. Informational sources for this evaluation include the Manteca General Plan¹, the Manteca General Plan EIR², the Natural Resources Conservation Service (NRCS) Soil Survey for San Joaquin County (Soil Map)³, and the Geotechnical Feasibility Study Prepared for Richland Developers conducted by Acacia Consultants and Engineers (ACE) and Geotechnical Exploration prepared by ENGEO (see Appendix F of this EIR).^{4,5}

4.6.2 EXISTING ENVIRONMENTAL SETTING

Background setting information regarding the geology and soils, seismicity, paleontological resources, and mineral resources associated with the project site and the surrounding region is provided below.

Geology and Soils

The following section describes the geology and soil characteristics that are present at the project site.

Regional Seismicity

A fault is defined as a fracture or zone of closely associated fractures along which rocks on one side have been displaced with respect to those on the other side. A fault zone is a zone of related faults that commonly are braided and subparallel, but may be branching or divergent. Movement within a fault causes an earthquake. When movement occurs along a fault, the energy generated is released as waves which cause ground shaking. Ground shaking intensity varies with the magnitude of the earthquake, the distance from the epicenter, and the type of rock or sediment through which the seismic waves move. Strong ground shaking is described as a motion of sufficient strength to affect people and their environment or any ground movement recorded on a strong motion instrument or seismograph. The common way to describe ground motion during an earthquake is with the motion parameters of acceleration and velocity in addition to the duration of the shaking.

¹ City of Manteca. *Manteca General Plan 2023 Policy Document*. October 6, 2003.

² City of Manteca. *City of Manteca General Plan 2023 Environmental Impact Report*. Certified October 6, 2003.

³ Natural Resources Conservation Service. *Soil Survey for San Joaquin County (Soil Map)*. November 14, 2013.

⁴ Acacia Consultants and Engineers. *Geotechnical Feasibility Study Prepared for Richland Developers*. November 26, 2012.

⁵ ENGEO, Inc. *Geotechnical Exploration: Hat Ranch Property, Manteca, California*. January 18, 2019.



The regional faults near the project site include the San Andreas, Hayward, and Calaveras faults; with the Rescue Lineament-Bear Mountains fault zone, Clayton-Marsh Creek-Greenville fault, O'Neil fault system, and Ortigalita faults having less of a potential impact. The known faults nearest to the City are the Tracy-Stockton Fault crossing southwest near Tracy to the northeast near Linden, and a small buried fault running southeast from the Tracy area. There are no active faults on the project site as delineated under the Alquist-Priolo Earthquake Zoning Act.⁶

The project site is located in an area rated as a low-intensity earthquake zone (Seismic Zone III). A low-intensity zone is defined by the United States Geological Survey (USGS) as an area that is likely to experience an earthquake measuring a maximum of 5.0-5.9 in magnitude on the Richter scale, and a maximum intensity of VII or VIII on the Modified Mercalli scale. The Richter scale measures the amplitude of seismic waves recorded by a seismograph. The Modified Mercalli scale measures the intensity of an earthquake by the way the shaking is felt and responded to by humans, and by the amount of damage the earthquake causes to buildings and structures. The Modified Mercalli scale is shown in Table 4.6-1.

Table 4.6-1 Modified Mercalli Scale of Earthquake Intensity	
Scale	Effects
I.	Earthquake shaking not felt.
II.	Shaking felt by those at rest.
III.	Felt by most people indoors; some can estimate the duration of shaking.
IV.	Felt by most people indoors. Having objects swing, windows and doors rattle, wooden walls and frames creak.
V.	Felt by everyone indoors; many estimate duration of shaking. Standing autos rock. Crockery clashes, dishes rattle, and glasses clink. Doors close, open, or swing.
VI.	Felt by everyone indoors and most people outdoors. Many now estimate not only the duration of the shaking, but also its direction and have no doubt as to its cause. Sleepers awoken. Liquids disturbed, some spilled. Small unstable objects displaced. Weak plaster and weak materials crack.
VII.	Many are frightened and run outdoors. People walk unsteadily. Pictures thrown off walls, books off shelves. Dishes or glasses broken. Weak chimneys break at roofline. Plaster, loose bricks, unbraced parapets fall. Concrete irrigation ditches damaged.
VIII.	Difficult to stand. Shaking noticed by auto drivers, waves on ponds. Small slides and cave-ins along sand or gravel banks. Stucco and some masonry walls fall. Chimneys, factory stacks, towers, elevated tanks twist or fall.
IX.	General fright. People thrown to the ground. Steering of autos affected. Branches broken from trees. General damage to foundations and frame structures. Reservoirs seriously damaged. Underground pipes broken.
X.	General panic. Conspicuous cracks in ground. Most masonry and frame structures destroyed along their foundations. Some well-built wooden structures and bridges are destroyed. Serious damage to dams, dikes, and embankments. Railroads bent slightly.
XI.	General panic. Large landslides. Water thrown out of banks of canals, rivers, lakes, etc. Sand and mud shifted horizontally on beaches and flatland. General destruction of buildings. Underground pipelines completely out of service. Railroads bent greatly.
XII.	General panic. Damage nearly total, the ultimate catastrophe. Large rock masses displaced. Lines of sight and level distorted. Objects thrown into air.
Source: California Division of Mines and Geology, 1973.	

⁶ California Department of Conservation, California Geological Survey. *Earthquake Zones of Required Investigation*. Available at: <https://maps.conservation.ca.gov/cgs/EQZApp/app/>. Accessed April 2022.



Regional Geotechnical Setting

The regional geology is influenced by the Great Valley, an elongated asymmetric structural lowland basin, which extends 500 miles north and south, separating the Sierra Nevada from the Coastal Ranges. The Great Valley was formed by the westward tilting of the Sierra Nevada block against the eastern flank of the Coastal Ranges. The basement rock complex of the Sierra extends westward, beneath the valley, on a gentle slope reaching points near the Coastal Ranges. Elevation in the valley is generally several hundred feet above sea level, but ranges from a low point below sea level to approximately 1,000 feet above sea level. Generally, slopes are nearly level across the City of Manteca with the elevation ranging from approximately 10 to 50 feet above sea level, gently rising from the San Joaquin River on the west toward the east and the Sierra Nevada. Drainage into the San Joaquin Valley is mainly from the Sierra Nevada.

The Great Valley is filled with thick sedimentary rock sequences or strata, which began deposition approximately 200 million years ago. Large alluvial fans that consist of unconsolidated to semi-consolidated gravel, sand, silt, and clay have developed on each side of the Valley. The larger and more gently sloping fans are located on the east side of the Valley and overlie metamorphic and igneous basement rocks. The basement rock is exposed in the Sierra Nevada Foothills and consists of metasediments, volcanics, and granites. The sediments that form the Valley floor were largely derived by erosion of the Sierra Nevada. The smaller and steeper slopes on the west side of the Valley overlie sedimentary rocks more closely related to the Coastal Ranges.

Project Site Soil Conditions

Based on the Geotechnical Study and the NRCS Web Soil Survey, (see Figure 4.6-1) the following soils are located on the project site:

- Delhi fine sand, 0 to 5 percent slopes;
- Delhi loamy sand, 0 to 2 percent slopes; and
- Tinnin loamy coarse sand, 0 to 2 percent slopes.

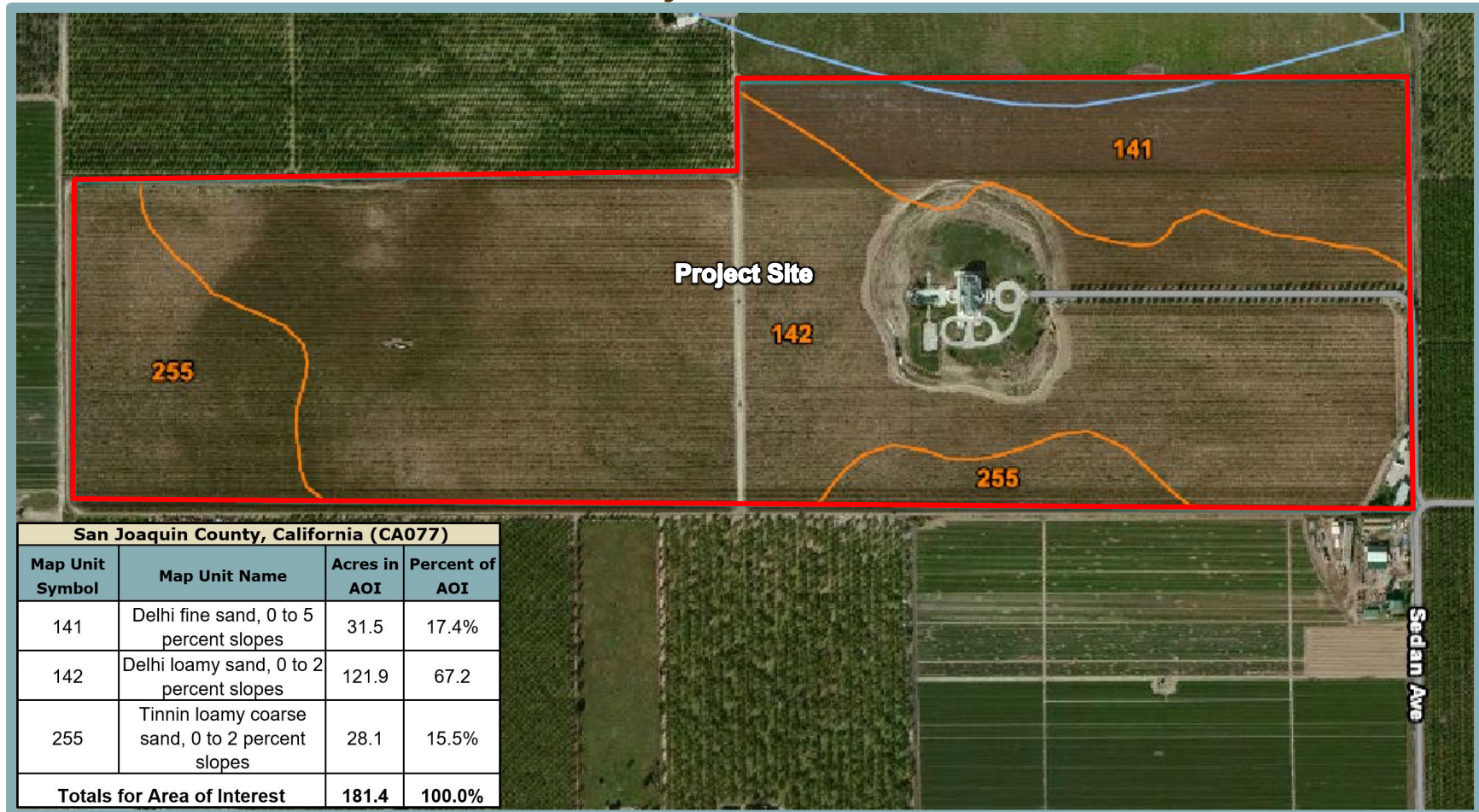
Soil characteristics may or may not make the soils suitable for accommodating uses such as shallow excavations, local roads and streets, and foundations associated with residential development and/or schools. Soil limitations could include slow or very slow permeability, limited ability to support a load, high shrink-swell potential, moderate depth to hardpan, low depth to rock, and frequent flooding. Each soil type identified above has characteristics that affect soil behavior, and each is described in further detail below.

Delhi fine sand, 0 to 5 percent slopes

The Delhi series consists of very deep, somewhat excessively drained soils. These soils formed in wind modified material weathered from granitic rock sources. Delhi soils are typically found on floodplains, alluvial fans, and terraces. Slopes are 0 to 15 percent. Delhi soils are somewhat excessively drained, with negligible to slow runoff, and demonstrate rapid permeability.



**Figure 4.6-1
 Project Site Soils**



Delhi loamy sand, 0 to 2 percent slopes

The Delhi loamy sand, 0 to 2 percent slopes soil type is a very deep soil formed on nearly level and gently sloping surfaces of former sand dune complexes, in aeolian sediment derived from granitic sources. The surface layer typically consists of grayish brown and light brownish gray loamy sand approximately 16 inches deep, overlying approximately 10 inches of grayish brown loamy sand, which in turn overlies approximately 34 inches of pale brown sand. The surface layer locally consists of loamy fine sand or fine sand. The soil is somewhat excessively drained, permeability is rapid, runoff is slow, and water erosion hazard is slight.

Tinnin loamy coarse sand, 0 to 2 percent slopes

The Tinnin loamy coarse sand, 0 to 2 percent slopes is a very deep, well drained, nearly level soil found on alluvial fans. The surface layer is typically grayish brown loamy, coarse sand approximately 28 inches thick, overlying approximately 25 inches of brown, mottled loamy coarse sand. The lower part to a depth of 75 inches is pale brown, mottled loamy coarse sand. Within Tinnin loamy coarse sand, permeability is rapid and water capacity is low. Runoff is slow and the hazard of water erosion is slight. In areas proposed for homesite development, the primary limitation associated with Tinnin loamy coarse sand that could potentially affect such development is the rapid permeability of the sand.

Expansive Soils

Expansive soils are those that increase in volume when they absorb water and shrink when they dry out, commonly referred to as “shrink-swell” potential. Soil surveys generally rate shrink-swell potential in soils on a low, medium, and high basis. If the shrink-swell potential is rated moderate to high, shrinking and swelling can cause damage to buildings, roads, and other structures. According to the Geotechnical Feasibility Study prepared for the proposed project, soils within the project site are non-plastic and should be considered to have a very low to nil expansion potential.

Liquefaction

Liquefaction occurs when saturated fine-grained sands and/or silts lose physical strength temporarily during earthquake-induced shaking and behave as a liquid due to the loss of point-to-point grain contact and transfer of normal stress to the pore water. Liquefaction potential varies with water level, soil type, material gradation, relative density, and probable intensity and duration of ground shaking. Pursuant to the California Geological Survey (CGS) California Earthquake Hazards Zone Application (EQ Zapp), the project site is not located within or adjacent to a mapped CGS Liquefaction Zone.⁷

Landslide

Seismically-induced landslides are triggered by earthquake ground shaking. The risk of landslide hazard is greatest in areas with steep, unstable slopes. The project site topography is relatively flat with an elevation of approximately 45 feet above mean sea level (msl). Although the existing residence is located on a knoll east of the proposed Pillsbury Road extension, the Geotechnical Feasibility Study determined that, based on site topography, the potential for landslides to occur is considered nil.

⁷ California Department of Conservation, California Geological Survey. *Earthquake Zones of Required Investigation*. Available at: <https://maps.conservation.ca.gov/cgs/EQZApp/app/>. Accessed April 2022.



Lateral Spreading

Lateral spreading is horizontal/lateral ground movement of relatively flat-lying soil deposits towards a free face such as an excavation, channel, slope, or open body of water; typically, lateral spreading is associated with liquefaction of one or more subsurface layers near the bottom of the exposed slope. Due to the relatively flat site topography and a lack of free faces, lateral spreading is not anticipated to occur at the project site.

Subsidence Potential

Subsidence is the settlement of soils. Settlement can result from either desiccation (dehydration) and shrinkage, or oxidation of organic material, or both, following drainage. As noted in the Manteca General Plan EIR, the Soil Survey for the City found that subsidence is not a characteristic of the soils that occur within the City, which includes those at the project site.

Paleontological Resources

Paleontological resources include fossil remains, as well as fossil localities and formations, which have produced fossil material in other nearby areas. The City of Manteca's General Plan 2023 record search did not identify paleontological resources within the Planning Area.⁸ However, research conducted in preparation of the San Joaquin County General Plan EIR indicates that 11 localities in San Joaquin County have yielded Late Pleistocene-Age large mammals, including bison, Jefferson's Ground Sloth, Yesterday's Camel, Columbian Mammoth, horse, and American Mastodon.⁹ The vast majority of paleontological specimens from San Joaquin County have been found in rock formations in the foothills of the Diablo Mountain Range; however, remains of extinct mammals could be found virtually anywhere in the County, including the City of Manteca.

Mineral Resources

According to the 2023 Manteca General Plan and General Plan EIR, the California Mining and Geology Board has identified one location within the General Plan study area as a Zone MRZ-2, Significant Mineral Resources Zone.¹⁰ This location is not located within the project site. As a result the project will have no impacts on mineral resources.

4.6.3 REGULATORY SETTING

The following section is a brief summary of the regulatory context under which geology, soils, and seismic hazards are managed at the federal, state, and local levels.

Federal Regulations

The following are the federal environmental laws and policies relevant to soils, geology, seismic hazards, mineral, and paleontological resources.

Federal Earthquake Hazards Reduction Act

Passed by Congress in 1977, the Federal Earthquake Hazards Reduction Act (44 U.S.C section 7701, et seq.) is intended to reduce the risks to life and property from future earthquakes. The Act established the National Earthquake Hazards Reduction Program (NEHRP). The goals of NEHRP are to educate and improve the knowledge base for predicting seismic hazards, improve land use

⁸ City of Manteca. *City of Manteca General Plan 2023 Environmental Impact Report*. Certified October 6, 2003.

⁹ San Joaquin County. *San Joaquin County 2025 General Plan Environmental Impact Report*. October 2014.

¹⁰ City of Manteca. *City of Manteca General Plan 2023 Environmental Impact Report* [pg. 1-7]. Certified October 6, 2003.



practices and building codes, and to reduce earthquake hazards through improved design and construction techniques.

Uniform Building Code

The Uniform Building Code (UBC) was first published in 1927 by the International Council of Building Officials and is intended to promote public safety and provide standardized requirements for safe construction. The UBC was replaced in 2000 by the new International Building Code (IBC), published by the International Code Council (ICC), which is a merger of the International Council of Building Officials' UBC, Building Officials and Code Administrators International's National Building Code, and the Southern Building Code Congress International's Standard Building Code. The intention of the IBC is to provide more consistent standards for safe construction and eliminate any differences between the three preceding codes. All State building standard codes are based on the federal building codes, and are updated every year.

State Regulations

The following State environmental laws and policies are relevant to soils, geology, seismic hazards, mineral resources, and paleontological resources.

Alquist-Priolo Earthquake Fault Zoning Act

The 1972 Alquist-Priolo Earthquake Fault Zone Act (Public Resources Code [PRC] Sections 2621-2630) was passed to prevent the new development of buildings and structures for human occupancy on the surface of active faults. The Act is directed at the hazards of surface fault rupture and does not address other forms of earthquake hazards. The locations of active faults are established into fault zones by the Alquist-Priolo Zone Act. Local agencies regulate any new developments within the appropriate zones in their jurisdiction.

The Alquist-Priolo Zone Act regulates development near active faults so as to mitigate the hazard of surface fault rupture. The Alquist-Priolo Zone Act requires that the State Geologist (Chief of the California Department of Mines and Geology [CDMG]) delineate "special study zones" along known active faults in California. Cities and counties affected by the special study zones must regulate certain development projects within the special study zones. The Alquist-Priolo Zone Act prohibits the development of structures for human occupancy across the traces of active faults. According to the Alquist-Priolo Zone Act, active faults have experienced surface displacement during the last 11,000 years. Potentially active faults are those that show evidence of surface displacement during the last 1.6 million years. A fault may be presumed to be inactive based on satisfactory geologic evidence; however, the evidence necessary to prove inactivity sometimes is difficult to obtain and may not exist.

Seismic Hazards Mapping Act

The California Seismic Hazards Mapping Act of 1990 (PRC Sections 1690-2699.6) addresses non-surface rupture earthquake hazards, including liquefaction, induced landslides, and subsidence. A mapping program is also established by the California Seismic Hazards Mapping Act, which identifies areas within California that have the potential to be affected by such non-surface rupture hazards. The Seismic Hazards Mapping Act specifies that the lead agency for a project may withhold development permits until geologic or soils investigations are conducted for specific sites and mitigation measures are incorporated into plans to reduce hazards associated with seismicity and unstable soils.



California Building Standards Code

The State of California regulates development within the State through a variety of tools that reduce or mitigate potential hazards from earthquakes or other geologic hazards. The 2019 California Building Standards Code (CBSC) (California Code of Regulations [CCR], Title 24) governs the design and construction of all building occupancies and associated facilities and equipment throughout California. In addition, the CBSC governs development in potentially seismically active areas and contains provisions to safeguard against major structural failures or loss of life caused by earthquakes or other geologic hazards. The CBSC includes federal building standards in the national building code, building standards adapted from national codes to meet California conditions, and building standards adopted to address particular California concerns.

Public Resources Code Section 5097.5

PRC Section 5097.5 establishes protections for historic, prehistoric, archaeological, and paleontological features. In particular, Section 5097.5 prohibits the intentional excavation, removal, destruction, injury, or defacement of historic or prehistoric ruins, burial grounds, and archaeological or vertebrate paleontological sites on public lands. Public lands are defined as those lands owned by, or under the jurisdiction of, the State, or any city, county, district, authority, public corporation, or any agency thereof.

Education Code Sections 17212 and 17212.5

Pursuant to Education Code Sections 17212 and 17212.5, if a prospective school site is located within the boundaries of any special studies zone, defined as an area which is identified as a special studies zone on any map(s) compiled by the State Geologist, or within an area designated as geologically hazardous in the safety element of a local general plan, a geotechnical investigation shall be required to provide an assessment of the nature of the site and potential for earthquake or other geological hazard. The geological and soil engineering studies of the site shall be of such a nature as will preclude siting of a school in any location where the geological and site characteristics are such that the construction effort required to make the school building safe for occupancy is economically infeasible. In addition, per Section 17212.5, school buildings shall not be constructed, reconstructed, or relocated on the trace of a geological fault along which surface rupture can reasonably be expected to occur within the life of the school building.

Local Regulations

Relevant goals and policies from the City of Manteca General Plan and various other local guidelines and regulations related to soils, geology, seismic hazards, mineral resources, and paleontological resources are discussed below.

Manteca General Plan 2023

The Manteca General Plan establishes the following goals and policies applicable to geology, soils and seismicity:

- | | |
|----------|---|
| Goal S-1 | Prevent loss of lives, injury, and property damage due to geological hazards and seismic activity. |
| Goal S-2 | Prevent loss of lives, injury, and property damage due to the collapse of buildings and critical facilities, and to prevent disruption of essential services in the event of an earthquake. |



- Policy S-P-1 The City shall require preparation of geological reports and/or geological engineering reports for proposed new development located in areas of potentially significant geological hazards, including potential subsidence (collapsible surface soils) due to groundwater extraction.
- Policy S-P-2 The City shall require new development to mitigate the potential impacts of geologic hazards through Building Plan review.
- Policy S-P-3 The City shall require new development to mitigate the potential impacts of seismic induced settlement of uncompacted fill and liquefaction (water-saturated soil) due to the presence of a high water table.
- Policy S-P-5 The City shall ensure that all public facilities, such as buildings, water tanks, and reservoirs, are structurally sound and able to withstand seismic shaking and the effects of seismically induced ground failure.
- Policy S-P-6 The City shall comply with the California State seismic and building standards in the design and siting of critical facilities, including police and fire stations, school facilities, hospitals, hazardous materials manufacturing and storage facilities, and large public assembly halls.

City of Manteca Municipal Code

Sections of the Municipal Code related to geology and soils, paleontological resources, and mineral resources applicable to the proposed project are presented below.

Chapter 13.28, Storm Water Management and Discharges

Chapter 13.28, Storm Water Management and Discharges, of the City of Manteca Municipal Code, includes definitions, conditions, and permit requirements for new development to minimize damage to surrounding properties and public rights-of-way, degradation of water quality, disruption of natural or City-authorized drainage flows caused by clearing, grading, filling, and excavating, and sediment and pollutant runoff.

Chapter 15.04, Building Code

Chapter 15.04, Building Codes, of the City of Manteca Municipal Code provides minimum standards to safeguard life or limb, health, property, and public welfare by regulating and controlling the design, construction, and installation of all buildings within the City. Section 15.04.10 adopts Title 24 of the CCR, and any rules and regulations incorporated within Title 24.

4.6.4 IMPACTS AND MITIGATION MEASURES

This section describes the standards of significance and methodology used to analyze and determine the proposed project's potential impacts related to geology and soils, paleontological resources, and mineral resources. A discussion of the project's impacts, as well as mitigation measures are presented when required.



Standards of Significance

An impact to geology, soils, paleontology, and seismicity is considered significant, consistent with Appendix G of CEQA Guidelines, if the proposed project would result in any of the following effects:

- Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:
 - 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;
 - Strong seismic ground shaking;
 - Seismic-related ground failure, including liquefaction; or
 - Landslides;
- Result in substantial soil erosion or loss of topsoil;
- 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 landslides, lateral spreading, subsidence, liquefaction or collapse;
- Be located on expansive soil, as defined in Table 18-1-B of the UBC (1994), creating substantial risks to life or property;
- 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;
- Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature; or
- 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 or of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan.

The proposed project's impacts associated with erosion are addressed in Chapter 4.8, Hydrology and Water Quality of this Draft EIR. Therefore, a discussion of the proposed project's potential to result in substantial soil erosion or loss of topsoil is not included within this chapter.

In addition, potential project impacts associated with landslides; septic tanks or alternative wastewater disposal systems; and mineral resources are hereby dismissed from analysis within this chapter, as the proposed project would not be vulnerable to or result in risks associated with the aforementioned geological hazards. The project site and surrounding areas in the project vicinity feature flat topography; therefore, the topography does not provide suitable terrain for landslides to occur. In addition, the proposed project would connect to the existing City wastewater collection infrastructure and be served by the City's Wastewater Quality Control Facility. Thus, the proposed project would not include a septic tank system. Finally, pursuant to the General Plan, mineral resources are not located on-site or in the project vicinity, and land designated or zoned for mineral resources is not within the City limits. Based on the above, the proposed project would not be located on a geologic unit or soil that is unstable or would become unstable and result in landslides, feature the use of septic tanks, or result in the loss of availability of a known mineral resource of value to the region or State, and the proposed project would result in no impact.



Method of Analysis

The chapter identifies any impacts to and from geological, seismic, or soils-related impacts that could occur during the construction and/or operation of the proposed project. Evaluation of potential geological and soil impacts were based on a review of the Geotechnical Feasibility Study prepared for the Hat Ranch project site by ACE. The Geotechnical Feasibility Study was based on a Phase I Environmental Site Assessment and a review of published data, including records searches and out-of-house reports/maps, and personal communications. The conclusions within the Geotechnical Exploration prepared by ENGEO were consistent with, and thereby affirm, the conclusions presented in the Geotechnical Feasibility Study. Impacts related to paleontological resources and mineral resources were evaluated based on the Manteca General Plan. The standards of significance listed above are used to delineate the significance of any potential impacts associated with the geology, soils, paleontology, and seismicity.

Project-Specific Impacts and Mitigation Measures

The following discussion of impacts is based on implementation of the proposed project in comparison with the standards of significance identified above.

4.6-1 The proposed project could cause potential substantial adverse effects, including the risk of loss, injury, or death involving rupture of a known earthquake fault, strong seismic ground shaking, seismic-related ground failure, including liquefaction, and landslides. Based on the analysis below and with implementation of mitigation, the impact is *less than significant*.

Based on the relatively flat site topography, the potential for landslides to occur on the project site is considered less-than-significant. However, as described above in the Existing Environmental Setting section of this chapter, the proposed project is located in an area that is seismically active. Given the known faults in the region, the project area could be expected to experience earthquakes ranging from 5.0 to 5.9 in magnitude on the Richter scale, and a maximum intensity of VII or VIII on the Modified Mercalli scale. In addition, significant earthquakes from regional fault systems have affected all of San Joaquin County in the past; therefore, the possibility of some level of regional ground shaking in the future is likely.

Liquefaction and related seismic hazards such as lateral spreading and differential settlement have the potential to compromise the structural integrity of the proposed residences, neighborhood parks, and elementary/middle school. Despite the potential for seismic events to cause damage to the structures on the project site, all structures would be designed in accordance with the 2019 CBSC and would be able to: 1) resist minor earthquakes without damage; 2) resist moderate earthquakes without structural damage, but with some non-structural damage; and 3) resist major earthquakes without collapse, but with some structural, as well as non-structural, damage. The City of Manteca's building regulations are included in the City's Municipal Code in Chapter 15.04 and are inclusive of the most recently adopted version of the CBSC. Compliance with the City's Municipal Code and the 2019 CBSC would ensure that potential impacts related to strong-seismic ground-shaking would be less-than-significant.



During earthquakes, ground shaking may cause a loss of strength in cohesionless saturated soils, a process called liquefaction. Liquefaction occurs most commonly in loose sands associated with a high-water table. According to the Geotechnical Feasibility Report, the closest water well monitored by the Department of Water Resources is located approximately one mile northeast of the project site. Based on available records, the groundwater elevation in the well has fluctuated from an elevation of approximately 31 to 37 feet msl or about 9 to 15 feet below grade. ACE concluded the groundwater within the project site would have substantially similar elevations. The presence of an elevated groundwater table in the vicinity of strong seismic-ground shaking indicates that the potential for the project site to experience seismically-induced liquefaction is high. Additionally, pursuant to the Geotechnical Exploration, liquefaction analysis of the on-site soils indicate relatively thin and discontinuous sand layers approximately one to five feet in thickness that are potentially liquefiable. Based on such characteristics, ENGEO determined that approximately 1.5 inches of total and up to 0.5-inch of differential liquefaction-induced settlement could occur during a design-level seismic event.

The project would include the construction of 738 single-family residential and half-plex units, two neighborhood parks, and an elementary/middle school on a project site that is susceptible to strong seismic-ground shaking and seismically-induced liquefaction. Without adherence to structural and design parameters recommended as part of a design-level geotechnical study, potentially adverse impacts, including the risk of loss, injury, or death involving strong seismic ground shaking and seismic-related ground failure, including liquefaction, could occur, and impacts would be ***potentially significant***.

Mitigation Measure(s)

Implementation of the following mitigation measures would reduce the above potential impact.

4.6-1(a) *Prior to approval of improvement plans for the project, the applicant shall submit to the Engineering Division, for review and approval, a design-level geotechnical engineering report that is produced by a California Registered Geotechnical Engineer and addresses the findings and recommendations of the geotechnical studies prepared for the proposed project. The design-level geotechnical report shall evaluate site soil conditions using a subsurface field investigation program consisting of both soil borings using Standard Penetration Test (SPT) sampling and Cone Penetration Tests (CPT). The report shall address and make recommendations on the following aspects of the project:*

- *Road, pavement, and parking area design;*
- *Structural foundations, including retaining wall design (if applicable);*
- *Grading practices;*
- *Erosion/winterization;*
- *Special problems discovered on-site, (i.e., groundwater, expansive/unstable soils, etc.);*



- Slope stability (if applicable to any required trenching activities);
- Estimates related to ground-shaking intensity, seismic settlement, and liquefaction potential; and
- Site-specific geotechnical design parameters for development (allowable bearing capacity, subsidence/settlement analysis, etc.).

The recommendations on the aforementioned aspects shall ensure that if implemented, all identified potential project impacts would be reduced to less-than-significant levels. All recommendations set forth in the design-level geotechnical engineering report shall be implemented into the final improvement plans for the proposed project, which shall be subject to review and approval by the City Engineer.

- 4.6-1(b) *All grading and foundation plans shall be reviewed and approved by the Engineering Division and the Building Safety Division, respectively, prior to issuance of building permits to ensure that all geotechnical recommendations specified in the geotechnical report(s) are properly incorporated and utilized in the design and reduce all identified potential project impacts to a less-than-significant level.*

Level of Significance Following Mitigation

Implementation of Mitigation Measure 4.6-1(a) would ensure a site-specific design-level geotechnical engineering report is prepared for the proposed project by a California Registered Geotechnical Engineer that evaluates on-site soil conditions and addresses any potentially significant project impacts. Additionally, implementation of Mitigation Measure 4.6-1(b) would ensure that the Engineering Division and the Building Safety Division reviews and approves all grading and foundation plans associated with the project to ensure that all geotechnical recommendations from the site-specific design-level geotechnical engineering report have been properly incorporated into the project. Implementation of the above mitigation measures would reduce the potentially significant environmental effects of the proposed project related to rupture of a known earthquake fault, strong seismic ground shaking, and seismic-related ground failure, including liquefaction, to a *less-than-significant* level.

4.6-2 The project could be located on a geological unit or soil that is unstable, or that could become unstable as a result of the project, and potentially result in on or off-site lateral spreading, subsidence, liquefaction, or collapse, or be located on expansive soil, as defined in Table 18-1B of the Uniform Building Code. Based on the analysis below and with implementation of mitigation, the impact is *less than significant*.

As mentioned previously under Existing Environmental Setting, subsidence is not a characteristic of the soils that occur within the City or at the project site. Issues associated with unstable geologic units and/or soils, including expansive soils, liquefaction, and lateral spreading are discussed below.



Expansive Soils

Expansive soils are those that increase in volume when they absorb water and shrink when they dry out, commonly referred to as “shrink-swell” potential. Soil surveys generally rate “shrink-swell” potential in soils on a low, medium, and high basis. If the shrink-swell potential is rated moderate to high, shrinking and swelling could cause damage to buildings, roads, and other structures; as a result, special design is often needed. According to the Manteca General Plan EIR, four of the 22 General Plan Study Area soils have been identified as expansive soils: Egbert (152), Egbert (153), Guard (169), and Galt (160). As indicated in Figure 4.6-1 above, none of these soil types are found on the Hat Ranch project site. In addition, according to the Geotechnical Feasibility Study prepared for the Hat Ranch project site, the on-site soil conditions have low expansion potential and are conducive to the type of residential development anticipated.

Liquefaction

Liquefaction occurs when saturated fine-grained sands and/or silts lose physical strength temporarily during earthquake induced shaking and behave as a liquid due to the loss of point-to-point grain contact and transfer of normal stress to the pore water. Liquefaction potential varies with water level, soil type, material gradation, relative density, and probable intensity and duration of ground shaking. The project site is not located within a State of California Seismic Hazard Zone for liquefaction. However, as mentioned under Impact 4.6-1 above, the project site is located in an area with a high potential for seismic ground-shaking and an elevated groundwater table that is approximately 9 to 15 feet below grade. Therefore, development of the project site with 738 residences, two neighborhood parks, and an elementary/middle school could result in a potentially significant impact regarding liquefaction.

Lateral Spreading

Lateral spreading is a form of slope failure in which gently sloping ground is displaced. Lateral spreading is caused by the accumulation of incremental displacements that develop within liquefied soil under cyclic loading and is typically associated with terrain near free faces such as excavations, channels, or open bodies of water. Due to the relatively flat site topography and a lack of free faces, lateral spreading is not anticipated to occur at the project site.

Conclusion

From a geotechnical standpoint, the project site is preliminarily considered suitable for the proposed construction. Nonetheless, the Geotechnical Feasibility Study recommends the design geotechnical engineer of record evaluate site soil conditions using a subsurface field investigation program consisting of soil borings using SPT sampling and CPT in order to formulate site-specific recommendations for the proposed project improvements, as appropriate. Because foundation and grading plans have not yet been prepared for the proposed project, preparation of a design-level geotechnical report has not been possible. Without design-level analysis from a geotechnical engineering perspective, a **potentially significant** impact could occur to the proposed residential structures and associated infrastructure systems from unstable soils if said structures are not properly designed to withstand and/or prevent soil expansion, lateral spreading, subsidence, or liquefaction.



Mitigation Measure(s)

Implementation of the following mitigation measure would reduce the above potential impact.

- 4.6-2 *Implement Mitigation Measure 4.6-1(a) and Mitigation Measure 4.6-1(b).*

Level of Significance Following Mitigation

Implementation of Mitigation Measure 4.6-2 would ensure that a site-specific design-level geotechnical engineering report is prepared for the proposed project and that the Engineering Division and the Building Safety Division reviews and approves all grading and foundation plans associated with the project to ensure that all geotechnical recommendations from the report have been properly incorporated into the project. Implementation of the above mitigation measure would reduce all potentially significant project impacts associated with being located on a geological unit or soil that is unstable, or that could become unstable as a result of the project, and potentially result in on or off-site impacts related to liquefaction to a *less-than-significant* level.

4.6-3 The project could directly or indirectly harm or destroy a unique paleontological resource or site or unique geologic feature. Based on the analysis below and with implementation of mitigation, the impact is *less than significant*.

The City of Manteca's 2023 General Plan record search did not identify paleontological resources within the Planning Area. However, research conducted in preparation of the San Joaquin County General Plan EIR indicates that 11 localities in San Joaquin County have yielded Late Pleistocene-Age large mammals, including bison, Jefferson's Ground Sloth, Yesterday's Camel, Columbian Mammoth, horse, and American Mastodon. The vast majority of paleontological specimens from San Joaquin County have been found in rock formations in the foothills of the Diablo Mountain Range; however, remains of extinct mammals could be found virtually anywhere in the County.

Based on the above information, the potential exists for previously unknown paleontological resources to exist within the project site. Therefore, ground-disturbing activity, such as grading, trenching, or excavating associated with implementation of the proposed project, could have the potential to disturb or destroy unknown paleontological resources, and a ***potentially significant*** impact could occur.

Mitigation Measure(s)

Implementation of the following mitigation measure would reduce the above potential impact.

- 4.6-3 *Prior to grading permit issuance, the applicant shall submit plans to the City of Manteca Community Development Department for review and approval which indicate (via notation on the improvement plans) that if construction or grading activities result in the discovery of unique paleontological resources, all work within 100 feet of the discovery shall*



cease immediately. The applicant shall notify the City of Manteca Community Development Department, and the resources shall be examined by a qualified paleontologist at the applicant's expense, for the purpose of recording, protecting, or curating the discovery as appropriate. The paleontologist shall submit to the Community Development Department for review and approval a report of the findings and method of curation or protection of the resources. Work may only resume in the area of discovery when the preceding work has occurred.

Level of Significance Following Mitigation

Implementation of Mitigation Measure 4.6-3 would ensure that if project construction or grading activities result in the inadvertent discovery of unique paleontological resources, all work within 100 feet of the discovery would cease immediately and a qualified paleontologist examines the resource for the purpose of recording, protecting, or curating the discovery, as appropriate. Therefore, implementation of Mitigation Measure 4.6-3 would reduce the project's potential to directly or indirectly harm or destroy a unique paleontological resource or site or unique geologic feature to a *less-than-significant* level.

Cumulative Impacts and Mitigation Measures

As defined in Section 15355 of the CEQA Guidelines, "cumulative impacts" refers to two or more individual effects which, when considered together, are considerable, compound, or increase other environmental impacts. The individual effects may be changes resulting from a single project or a number of separate projects. The cumulative impact from several projects is the change in the environment that results from the incremental impact of the project when added to other closely related past, present, and reasonably foreseeable probable future projects.

4.6-4 Cumulative impacts to geology and soils, mineral resources, and paleontological resources. Based on the analysis below, the cumulative impact is *less than significant*.

While some geologic characteristics may affect regional construction practices, impacts and mitigation measures are primarily site-specific and project-specific. For example, impacts resulting from development on expansive soils at one project site are not worsened by impacts from development on expansive soils or undocumented fill at another project site. Rather, the soil conditions, and the implications of such conditions for each project, are independent. Similarly, impacts to paleontological resources are largely site-specific.

As such, the potential for cumulative impacts related to geology, soils, seismicity, paleontological resources, and mineral resources, to which implementation of the proposed project might contribute, is ***less than significant***.

Mitigation Measure(s)

None required.



4.7 HAZARDS AND HAZARDOUS MATERIALS

4.7 HAZARDS AND HAZARDOUS MATERIALS

4.7.1 INTRODUCTION

This chapter of the EIR describes existing and potentially occurring hazards and hazardous materials within the project area. This chapter discusses potential impacts posed by hazards to the environment, as well as to workers, visitors, and residents within and adjacent to the project area. The chapter also addresses potential impacts related to wildfire. This chapter utilizes information from the Manteca General Plan¹ and the Manteca General Plan EIR,² but is primarily based on a Phase I Environmental Site Assessment (ESA)³ prepared for the project site by ENGEO, Inc. (see Appendix G of the EIR).

In response to the Notice of Preparation (NOP), the City received comments related to hazards and hazardous materials regarding the potential for historic or future activities on or near the project site to result in the release of hazardous wastes/substances, the presence of hazardous materials within on-site structures that would be demolished, and potential impacts related to fire safety. The comments have been carefully reviewed and considered by the City of Manteca and are reflected in the analysis of impacts in this chapter. It should be noted that the project site and immediate vicinity have not been used for mining, and therefore, the proposed project would result in no impact related to such conditions.

4.7.2 EXISTING ENVIRONMENTAL SETTING

The existing environmental setting of the project site related to hazards and hazardous materials is a function of the historical uses of the site, the current use of the site, and any features present on the site that may present a potential hazard. The setting of the project site is presented below. The project's proximity to an airfield and the risk level related to wildfires is presented below.

Project Site Historic and Current Use

Per the ESA, review of historical records indicate that the project site has been occupied by a residence and agricultural land since at least 1937. The site is currently occupied by a 20,000-square-foot residence, two shop buildings, and vineyards. Septic systems have been permitted for the on-site structures. Residential housing developments are located directly to the north and west of the project site. Agricultural land, including orchards and row crops, are located to the south and east of the project site.

Historical U.S. Geological Survey (USGS) topographic maps and aerial photographs were examined as part of the ESA's review of historical records to determine if discernible changes pertaining to the project site have been recorded. Sanborn Fire insurance maps were not available for the site. Since 1914 the site appears to have been flat, vacant land, with multiple farmhouses and roads in the vicinity. In 1937, a house was constructed in the southeast corner of the property with two irrigation channels intersecting the site's northwest and northeast areas. During this time

¹ City of Manteca. *Manteca General Plan 2023 Policy Document*. October 6, 2003.

² City of Manteca. *City of Manteca General Plan 2023 Environmental Impact Report*. Certified October 6, 2003.

³ ENGEO, Inc. *Phase I Environmental Site Assessment, Hat Ranch Property, Manteca, California*. December 2, 2020.



period, the site appears to be used for row crops and orchards, with agricultural uses also being present on the surrounding properties. The irrigation channels were backfilled between 1963 and 1968. The project site and surrounding properties remained appear to remain unchanged related to uses through a historical 1993 photograph. By 2006, the house in the southeast corner was demolished and replaced with the existing shop buildings and residence. Around this time residential uses developed to the north. The previous orchards and row crops were replaced with the current vineyards. By 2016, the residential developments that currently border the north and west perimeters are shown to be under construction.

In addition to the review of historic maps and aerial photographs, the ESA incorporates data from searches of federal, tribal, State, and local databases to determine if the project site or surrounding properties contain any known hazard or hazardous material. The project site was not listed in any of the environmental record source databases. The search did yield 13 facilities that are within the American Society for Testing and Materials (ASTM) proximity boundary required for review. The nearest listed facility is 158 feet from the project site. The furthest listed facility is 3,707 feet from the project site. A listing on the aforementioned databases is not considered to be indicative of a release of a hazardous material or petroleum product at a property. Based on the distances to the sites identified by the databases, as well as the regional topographic gradient, the ESA concluded that it is unlikely that the 13 listed sites pose an environmental risk to the project site. For further details regarding the identified facilities located near the project site that are listed in federal, State, and/or local databases of hazardous materials sites, please see Appendix A of the ESA (attached as Appendix G to this EIR).

Hazards Associated with the Project Site and Surrounding Properties

The term hazardous substance refers to both hazardous materials and hazardous wastes. A material is defined as hazardous if the material appears on a list of hazardous materials prepared by a federal, state, or local regulatory agency or if the material has characteristics defined as hazardous by such an agency.

The California Environmental Protection Agency, Department of Toxic Substances Control (CalEPA, DTSC) defines hazardous waste, as found in the California Health and Safety Code, Section 25141(b), as follows:

[...] its quantity, concentration, or physical, chemical, or infectious characteristics: (1) cause, or significantly contribute to an increase in mortality or an increase in serious irreversible, or incapacitating reversible illness; (2) pose a substantial present or potential hazard to human health or the environment, due to factors including, but not limited to, carcinogenicity, acute toxicity, chronic toxicity, bioaccumulative properties, or persistence in the environment, when improperly treated, stored, transported, or disposed of, or otherwise managed.

ENGEO performed a site reconnaissance of the project site to identify any recognized environmental conditions (RECs). The project site was viewed for hazardous materials storage, superficial staining or discoloration, debris, stressed vegetation, or other conditions that may be indicative of potential sources of soil or groundwater contamination. The project site was also checked for evidence of fill/ventilation pipes, ground subsidence, or other evidence of existing or preexisting underground storage tanks (USTs). Table 4.7-1 provides a summary of observations from the reconnaissance.



**Table 4.7-1
Project Site Observations**

Feature Type	Observation
Structures	The site includes a residence and two shop buildings.
Hazardous Substances and Petroleum Products in Connection with Identified Uses	Not observed on-site.
Storage Tanks (underground and above-ground)	Multiple above-ground storage tanks for water were observed. Evidence of existing USTs was not observed.
Odors	Not observed on-site.
Pools of Potentially Hazardous Liquid	Not observed on-site.
Drums	Five empty drums of the herbicide <i>Cornerstone Plus</i> were observed.
Polychlorinated Biphenyls (PCBs) Containing Equipment	Not observed on-site.
Hazardous Substances and Petroleum Product Containers	A pile of empty pesticide containers of <i>Total TNV</i> was observed at the smaller shop building.
Pits, Ponds, and Lagoons	Not observed on-site.
Stained Soil/Pavement	Not observed on-site.
Stressed Vegetation	Not observed on-site.
Solid Waste/Debris	Not observed on-site.
Stockpiles/Fill Material	A soil stockpile was observed in the northwest corner of the Property during the reconnaissance.
Wastewater Conveyance Systems	Not observed on-site.
Wells	Wells were not found within the project site, though it is feasible one or more exist to supply the irrigation system and buildings. Multiple domestic wells are permitted for 9701 Sedan Avenue in the project site's southeast corner.
Septic Systems	Septic systems were not found within the project site, but two septic tanks were permitted for both the residence and larger shop building.
Source: ENGEO, Inc. Phase I Environmental Site Assessment, Hat Ranch Property, Manteca, California. December 2, 2020.	

Regarding wells and septic systems, it should be noted that although wells or septic systems were not found within the project site during the reconnaissance, the ESA determined that both features could exist on-site, as multiple domestic wells were permitted in the southeast corner of the site and two septic tanks were permitted for both the residence and the larger shop building.

With respect to indoor air quality, an evaluation of indoor air quality, mold, or radon was not conducted in the existing on-site residence as part of the reconnaissance of the project site, as the proposed project could involve the demolition of the residence. However, according to the ESA, the California Department of Public Health conducted studies of radon risks throughout the State, sorted by zip code, and the results of the studies indicated that five tests were conducted within the project site's zip code, with one test exceeding the current U.S. Environmental Protection Agency (USEPA) action level of four picocuries per liter (pCi/L).⁴ According to the USEPA, radon is found in outdoor air and in the indoor air of various types of buildings. Exposure

⁴ U.S. Environmental Protection Agency. *What is EPA's Action Level for Radon and What Does it Mean?* Available at: <https://www.epa.gov/radon/what-epas-action-level-radon-and-what-does-it-mean>. Accessed February 2021.



to radon can cause lung cancer in smokers and non-smokers. Radon is the number one cause of lung cancer among non-smokers, according to USEPA estimates, and the second-leading cause of lung cancer. Regarding the USEPA's action level for radon, the USEPA recommends homes be repaired through a qualified radon mitigation contractor if the radon level is four pCi/L or more.

In accordance with ASTM E2600-15 (Tier 1) (*Standard Guide for Vapor Encroachment Screening on Property Involved in Real Estate Transactions*), the ESA determined potential petroleum hydrocarbon sources for vapor intrusion do not exist within 1/10 mile of the project site, and volatile organic compound (VOCs) sources do not exist within 1/3 mile of the project site. Exposure to vapor intruding from ground sources of petroleum hydrocarbons and VOCs can lead to detrimental effects on human health; the ESA's finding that potential petroleum hydrocarbon sources for vapor intrusion are not located within 1/10 mile of the site indicates the project site is not currently vulnerable to such risks.

Airports and Private Airstrips

Land uses and development adjacent to airports in San Joaquin County are governed by the *Airport Land Use Compatibility Plan (ALUCP)* prepared by the San Joaquin Council of Governments (SJCOG). The ALUCP establishes development criteria for the allowable building height and building materials for subareas measured at specific distances within the areas of influence of San Joaquin County airports. Stockton Metropolitan Airport, Tracy Municipal Airport, Lodi Airport, Kingdon Airport, New Jerusalem Airport, and Lodi Airpark are covered by the ALUCP. The nearest airport to the project site is the Stockton Metropolitan Airport, which is located over eight miles to the north of the project site. As such, the project site is not within the ALUCP area or the area of influence of the nearest airport and is not subject to the development standards required by the Plan.

Wildfire Hazards

According to the California Department of Forestry and Fire Protection's (CAL-FIRE) Fire and Resource Assessment Program (FRAP), the project site is located within an un-zoned Local Responsibility Area (LRA). A LRA is an area that is not under federal or State responsibility, giving the local agency sole responsibility for fire suppression activities. Per CAL-FIRE's most recent update for the County, the County does not have a Very High Fire Hazard Severity Zone (VHFHSZ). In addition, the project site is not located in or adjacent to a State Responsibility Area (SRA). Public Resources Code (PRC) Sections 4201 through 4204 direct CAL FIRE to map fire hazards within SRAs, based on relevant factors such as fuels, terrain and weather. SRAs are recognized by the Board of Forestry and Fire Protection as areas where CAL FIRE is the primary emergency response agency responsible for fire suppression and prevention. The nearest SRA is located approximately 13.3 miles southwest of the project site.

Currently, the project site is neighbored to the north and west by low-density residential development that limits the potential risk for a wildfire. However, lands to the south and east of the project site are planted with orchards and could be susceptible to potential wildfire risks.

4.7.3 REGULATORY SETTING

The following discussion contains a summary of regulatory controls pertaining to hazards and hazardous materials, including federal, State, and local laws and ordinances.



Federal Regulations

Federal agencies that regulate hazardous materials include the USEPA, the Occupational Safety and Health Administration (OSHA), the Department of Transportation (DOT), and the National Institute of Health (NIH). Prior to August 1992, the principal agency at the federal level regulating the generation, transport, and disposal of hazardous waste was the USEPA under the authority of the Resource Conservation and Recovery Act (RCRA). As of August 1, 1992, however, the California DTSC was authorized to implement the State's hazardous waste management program for the USEPA. The USEPA continues to regulate hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA). The following federal laws and related regulations govern hazardous materials.

Occupational Safety and Health Act

Congress passed the Occupational and Safety Health Act (29 U.S. Code Section 651 et seq. [1970]) to ensure worker and workplace safety. Their goal was to make sure employers provide their workers a place of employment free from recognized hazards to safety and health, such as exposure to toxic chemicals, excessive noise levels, mechanical dangers, heat or cold stress, or unsanitary conditions. In order to establish standards for workplace health and safety, the Act also created the National Institute for Occupational Safety and Health (NIOSH) as the research institution for OSHA. OSHA is a division of the U.S. Department of Labor that oversees the administration of the Act and enforces standards in all 50 states. OSHA requires 40 hours of training for hazardous materials operators, as well as an annual eight-hour refresher course, which includes training regarding personal safety, hazardous materials storage and handling, and emergency response.

Comprehensive Environmental Response, Compensation, and Liability Act

CERCLA (42 U.S.C. Section 9601 et seq. [1980]) provides a federal "Superfund" to clean up uncontrolled or abandoned hazardous-waste sites as well as accidents, spills, and other emergency releases of pollutants and contaminants into the environment. Through CERCLA, the USEPA was given power to seek out those parties responsible for any release and assure their cooperation in the cleanup. The USEPA cleans up orphan sites when potentially responsible parties cannot be identified or located, or when they fail to act. Through various enforcement tools, USEPA obtains private party cleanup through orders, consent decrees, and other small party settlements. The USEPA also recovers costs from financially viable individuals and companies once a response action has been completed. The USEPA is authorized to implement the Act in all 50 states and U.S. territories.

Superfund Amendments and Reauthorization Act of 1986

The Superfund Amendments and Reauthorization Act (SARA) of 1986, (Title III; Section 305(a)) reauthorized CERCLA to continue cleanup activities around the country. Several site-specific amendments, definitions clarifications, and technical requirements were added to the legislation, including additional enforcement authorities. In addition, Title III of SARA authorized the Emergency Planning and Community Right-to-Know Act (EPCRA). SARA, Title III provides funding for training in emergency planning, preparedness, mitigation, response, and recovery capabilities associated with hazardous chemicals. Title III of SARA addresses concerns about emergency preparedness for hazardous chemicals, and emphasizes helping communities meet their responsibilities in preparing to handle chemical emergencies and increasing public knowledge and access to information on hazardous chemicals present in their communities.



Resource Conservation and Recovery Act

RCRA (42 U.S.C. Section 6901 et seq. [1976]) gives USEPA the authority to control hazardous waste from the "cradle-to-grave," which includes the generation, transportation, treatment, storage, and disposal of hazardous waste. RCRA also set forth a framework for the management of non-hazardous solid wastes. The 1986 amendments to RCRA enabled USEPA to address environmental problems that could result from underground tanks storing petroleum and other hazardous substances. The federal Hazardous and Solid Waste Amendments (HSWA) are the 1984 amendments to RCRA that focused on waste minimization and phasing out land disposal of hazardous waste as well as corrective action for releases. Some of the other mandates of this law include increased enforcement authority for USEPA, more stringent hazardous waste management standards, and a comprehensive underground storage tank program. States have the authority to implement individual hazardous waste programs in lieu of the RCRA as long as the state program is as stringent as federal RCRA requirements and is approved by the USEPA.

Toxic Substances Control Act

The Toxic Substances Control Act (TSCA) of 1976 (15 U.S.C. Section 2601 et seq. [1976]) provides USEPA with authority to require reporting, record-keeping and testing requirements, and restrictions relating to chemical substances and/or mixtures. Certain substances are generally excluded from TSCA, including, among others, food, drugs, cosmetics, and pesticides. TSCA addresses the production, importation, use, and disposal of specific chemicals including polychlorinated biphenyls (PCBs), asbestos, radon, and lead-based paint.

U.S. Department of Transportation

Transportation of hazardous materials is regulated by the DOT's Office of Hazardous Materials Safety. The office formulates, issues, and revises hazardous materials regulations under the Federal Hazardous Materials Transportation Law. The hazardous materials regulations cover hazardous materials definitions and classifications, hazard communications, shipper and carrier operations, training and security requirements, and packaging and container specifications. The hazardous materials transportation regulations are codified in 49 Code of Federal Regulations (CFR) Parts 100–185.

The hazardous materials transportation regulations require carriers transporting hazardous materials to receive required training in the handling and transportation of hazardous materials. Training requirements include pre-trip safety inspections, use of vehicle controls and equipment including emergency equipment, procedures for safe operation of the transport vehicle, training on the properties of the hazardous material being transported, and loading and unloading procedures. All drivers must possess a commercial driver's license as required by 49 CFR Part 383. Vehicles transporting hazardous materials must be properly placarded. In addition, the carrier is responsible for the safe unloading of hazardous materials at the site, and operators must follow specific procedures during unloading to minimize the potential for an accidental release of hazardous materials.

Asbestos Hazard Emergency Response Act

The 1986 Asbestos Hazard Emergency Response Act (AHERA) was signed into law as Title II of the TSCA, requiring the Asbestos Model Accreditation Plan (MAP) for accrediting individuals conducting asbestos inspection and corrective-action activities in schools and public and commercial buildings. The MAP provides guidance on the minimum training requirements for accrediting asbestos professionals such as, procedural entry, exit, sampling, and monitoring, safety hazards, and relevant federal, State, and local regulatory standards.



Lead-based Paint Regulations

Lead pollutants are regulated by several laws administered by the USEPA, including the TSCA, the Residential Lead-Based Paint Hazard Reduction Act of 1992, the Clean Air Act (CAA), the Clean Water Act (CWA), the Safe Drinking Water Act (SDWA), the RCRA, and CERCLA. The aforementioned regulations address lead in paint, dust and soil, lead in air and water, and the disposal of lead wastes. Regulations specific to lead-based paint include, but are not limited to, the Lead Renovation Repair and Painting Program Rule, the Lead Abatement Program, the residential Lead-based Paint Disclosure Program, and Residential Hazards of Lead in Paint, Dust and Soil. Such regulations require risk assessments, inspections, and work practices that work to minimize exposure to lead hazards.

State Regulations

The CalEPA and the State Water Resources Control Board (SWRCB) establish rules governing the use of hazardous materials and the management of hazardous waste. Within CalEPA, DTSC has primary regulatory responsibility, with delegation of enforcement to local jurisdictions that enter into agreements with the State agency, for the management of hazardous materials and the generation, transport, and disposal of hazardous waste under the authority of the Hazardous Waste Control Law (HWCL). The following discussion contains the applicable State laws.

Regional Water Quality Control Board

The CalEPA and the Office of Emergency Services (OES) establish regulations governing the use of hazardous materials in California. Within CalEPA, DTSC has primary regulatory responsibility for hazardous waste management. Enforcement of regulations can be delegated to local jurisdictions that enter into agreements with DTSC for the generation, transport, and disposal of hazardous materials under the authority of the HWCL. Along with the DTSC, the Regional Water Quality Control Board (RWQCB) is responsible for implementing regulations pertaining to management of soil and groundwater investigation and cleanup. The RWQCB's regulations are contained in Title 27 of the California Code of Regulations (CCR). The DTSC, RWQCB, and/or a local agency typically oversees investigation and cleanup of contaminated sites.

Department of Toxic Substances Control

The DTSC was established to protect California against threats to public health and degradation to the environment and to restore properties degraded by past environmental contamination. Through statutory mandates, DTSC cleans up existing contamination, regulates management of hazardous wastes, and prevents pollution by working with businesses to reduce hazardous waste and use of toxic materials in California. DTSC regulates the generation, transportation, treatment, storage, and disposal of hazardous waste in California. In addition, DTSC's Site Mitigation and Brownfields Reuse Program oversees the cleanup of State Superfund sites. State Superfund sites are additionally known as Annual Workplan sites, listed sites, or Cortese List sites. Superfund sites demonstrate evidence of a hazardous substance release or releases that could pose a significant threat to public health and/or the environment. DTSC requires responsible parties to cleanup such sites. When responsible parties cannot be found or where they do not take proper and timely action, DTSC may use State funds to undertake the cleanup.

California Code of Regulations

Hazardous waste is characterized and defined in CCR, Title 22, Sections 66261.20-24. Soils that meet the descriptions of the characteristics of hazardous waste defined in Sections 66261.20-24 and contain contaminants above regulatory screening levels are considered hazardous waste



and must be handled and disposed of as such. The CCR includes the California Health and Safety Code.

California Health and Safety Code

The handling and storage of hazardous materials is regulated at the federal level by the USEPA under CERCLA as amended by the SARA. Under SARA Title III, a nationwide emergency planning and response program was established that imposed reporting requirements for businesses which store, handle, or produce significant quantities of hazardous or acutely toxic substances as defined under federal laws. SARA Title III required each state to implement a comprehensive system to inform federal authorities, local agencies, and the public when a significant quantity of hazardous, acutely toxic substances are stored or handled at a facility.

Ammonia is an example of an acutely hazardous material (AHM) that is regulated by the California Office of Emergency Services under the California Accidental Release Program (CalARP), the USEPA under the Risk Management Program (40 CFR 68), and the OSHA under the Process Safety Management Program (OSHA 1910.119). The CalARP and Risk Management Program require that all facilities that store, handle, or use AHMs above a minimum quantity, known as the threshold planning quantity, are required to develop a plan and prepare supporting documentation that summarizes the facility's potential risk to the local community and identifies safety measures to reduce potential risks to the public.

The HWCL, Chapter 6.5 of the California Health and Safety Code, is administered by the CalEPA to regulate hazardous wastes. While the HWCL is generally more stringent than RCRA, until the USEPA approves the California program, both the State and federal laws apply in California. The HWCL lists 791 chemicals and about 300 common materials that may be hazardous; establishes criteria for identifying, packaging, and labeling hazardous wastes; prescribes management controls; establishes permit requirements for treatment, storage, disposal and transportation; and identifies some wastes that cannot be disposed of in landfills.

In California, the underground storage of hazardous materials is regulated by Chapter 6.7 of the California Health and Safety Code per the Underground Storage of Hazardous Substances Act. Under Section 25280, the USTs used for the storage of substances hazardous to the public health and safety and to the environment are stored prior to use or disposal in thousands of underground locations in the State. The USTs used for storage are potential sources of contamination of the ground and underlying aquifers, and may pose other dangers to public health and the environment. Chapter 6.7 establishes orderly procedures that will ensure that newly constructed USTs meet appropriate standards and that existing tanks be properly maintained, inspected, tested, and upgraded so that the health, property, and resources of the people of the State will be protected.

The handling and storage of hazardous materials is regulated by Chapter 6.95 of the California Health and Safety Code. Under Sections 25500–25543.3, facilities handling hazardous materials are required to prepare a Hazardous Materials Business Plan. The plan provides information to the local emergency response agency regarding the types and quantities of hazardous materials stored at a facility, and provides detailed emergency planning and response procedures in the event of a hazardous materials release. In the event that a facility stores quantities of specific acutely hazardous materials above the thresholds set forth by the California code, facilities are also required to prepare a Risk Management Plan and California Accidental Release Plan, which



provides information on the potential impact zone of a worst-case release, and requires plans and programs designed to minimize the probability of a release and mitigate potential impacts.

California Vehicle Code Section 31303

The California Highway Patrol (CHP) and California Department of Transportation (Caltrans) are the enforcement agencies for hazardous materials transportation regulations. Hazardous materials and waste transporters are responsible for complying with all applicable packaging, labeling, and shipping regulations. California Vehicle Code Section 31303 regulates the transport of hazardous materials.

Emergency Response to Hazardous Materials Incidents

California has developed an emergency response plan to coordinate emergency services provided by federal, State, and local governments and private agencies. Response to hazardous material incidents is one part of this plan. The plan is managed by the Governor's OES, which coordinates the responses of other agencies, including CalEPA, CHP, California Department of Fish and Wildlife (CDFW), Central Valley RWQCB, and the Manteca Fire Department.

Unified Hazardous Materials Management Regulatory Program

On January 1, 1996, CalEPA adopted implementing regulations and implemented a unified hazardous waste and hazardous materials management regulatory program (Unified Program), to consolidate the administration of specified statutory requirements for the regulation of hazardous wastes and materials. The Unified Program is implemented at the local level by government agencies certified by the Secretary of CalEPA. The Certified Unified Program Agency (CUPA) is responsible for implementation of the Unified Program. CUPA is certified and responsible for oversight of the following consolidated programs: Hazardous Materials Release Response Plans and Inventories (Business Plans); California Accidental Release Program; Underground Storage Tank Program; Aboveground Petroleum Storage Act; Hazardous Waste Generator and Onsite Hazardous Waste Treatment (tiered permitting) Programs; and California Uniform Fire Code: Hazardous Materials Management Plans and Hazardous Material Inventory Statements.

Local Regulations

The following are the local environmental laws and policies relevant to hazards and hazardous materials.

San Joaquin County Environmental Health Department

The San Joaquin County Environmental Health Department (SJCEHD) inspects restaurants, mobile food units, employee housing, hotels and motels, public water systems, dairies, wells, and USTs, and enforces environmental health regulations associated with many other business and construction activities. The SJCEHD works with emergency response teams in the event of a hazardous waste incident. As the CUPA, the SJCEHD works with other agencies to coordinate hazardous materials program inspection and permitting activities. The Unified Program is a statewide program overseen by the CalEPA that delegates the responsibility of applying regulatory standards established by State agencies to local agencies through inspections, permitting, and enforcement activities. The Unified Program encompasses regulatory standards from the Governor's OES, DTSC, Office of the State Fire Marshal (OSFM), the SWRCB, and CalEPA.



Manteca General Plan 2023

The following goals and policies related to hazardous materials and hazards are included in the Manteca General Plan.

Goal S-5	The City shall protect the health, safety, natural resources, and property through regulation of use, storage, transport, and disposal of hazardous materials.
Policy S-P-15	The City shall maintain an awareness of hazardous materials throughout the Manteca region.
Policy S-P-16	City approvals of all new development shall consider the potential for the production, use, storage, and transport of hazardous materials and provide for reasonable controls on such hazardous materials.
Policy S-P-17	Within its authority, the City shall regulate the production, use, storage, and transport of hazardous materials to protect the health of Manteca residents.
Policy S-I-11	The City shall work with San Joaquin County and other public agencies to inform consumers about household use and disposal of hazardous materials.
Policy S-I-12	Cooperate fully with Union Pacific Railroad and other agencies, such as the CHP, in the event of a hazardous material emergency.
Policy S-I-13	Continue the City hazardous waste pick-up program for household hazardous materials.
Goal S-6	Ensure that City emergency procedures are adequate in the event of potential natural or man-made disasters.
Policy S-P-18	The City shall maintain and periodically update the City's Emergency Plan.
Policy S-I-14	The City shall conduct periodic emergency response exercises to test the effectiveness of City emergency response procedures.
Policy S-I-15	The City shall review County and State emergency response procedures that must be coordinated with City procedures.

4.7.4 IMPACTS AND MITIGATION MEASURES

The following section describes the standards of significance and methodology used to analyze and determine the proposed project's potential impacts related to hazards, hazardous materials, and wildfire. In addition, a discussion of the project's impacts and mitigation measures where necessary, is presented.



Standards of Significance

In accordance with CEQA Guidelines Appendix G, the effects of a project are evaluated to determine if they would result in a significant adverse impact on the environment. For the purposes of this EIR, an impact is considered significant if the proposed project would:

- Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials;
- 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;
- Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school;
- 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, create a significant hazard to the public or the environment;
- 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;
- Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan;
- Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires; or
- If located in or near State Responsibility Areas or lands classified as very high fire hazard severity zones, would the project:
 - Substantially impair an adopted emergency response plan or emergency evacuation plan;
 - 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;
 - 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; or
 - 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.

Method of Analysis

Site conditions and impacts for this chapter are based on the Manteca General Plan, the Manteca General Plan EIR, and local, State, and federal database searches conducted during preparation of the ESA.

Phase I ESA Methodology

As part of the ESA, ENGEO, Inc. performed a review of local, State, tribal, and federal environmental record sources, standard historical sources, aerial photographs, fire insurance maps, and physical setting sources. A reconnaissance of the project site was completed to review the site use and current conditions, to check for the storage, use, production, or disposal of hazardous or potentially hazardous materials, and to conduct written/oral interviews with persons knowledgeable about current and past site use. ENGEO performed the following:



- A review of publicly available and practically reviewable standard local, State, tribal, and federal environmental record sources;
- A review of publicly available and practically reviewable standard historical sources, aerial photographs, fire insurance maps, and physical setting sources;
- A reconnaissance of the property to review site use and current conditions, and to check for the storage, use, production, or disposal of hazardous or potentially hazardous materials; and
- Interviews with owners/occupants and public sector officials.

The purpose of the historical record review is to develop a history of the previous uses or occupancies of the project site and surrounding area in order to identify those uses or occupancies that are likely to have led to RECs on the project site.

As part of the reconnaissance of the project site, the site was inspected for hazardous materials storage, superficial staining or discoloration, debris, stressed vegetation, or other conditions that may be indicative of potential sources of soil or groundwater contamination. The site was also checked for evidence of fill/ventilation pipes, ground subsidence, and other evidence of existing or pre-existing USTs.

Project-Specific Impacts and Mitigation Measures

The following discussion of hazards and hazardous materials impacts is based on implementation of the proposed project in comparison to existing conditions and the standards of significance presented above.

4.7-1 Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials. Based on the analysis below, the impact is *less than significant*.

Typically, projects that involve the routine transport, use, or disposal of hazardous materials are industrial in nature. The proposed project will consist of a residential development with public/quasi-public and recreational components. Residential land uses are not typically associated with the routine transport, use, disposal, or generation of substantial amounts of hazardous materials. Future residents may use common household cleaning products on-site, which could contain potentially hazardous chemicals; however, due to the regulations of such products and the amount that would be expected to be utilized on the site, routine use of such products would not represent a substantial risk to the public health or the environment. In addition, the proposed project's public/quasi-public component, which would involve the construction of an elementary/middle school, and the project's recreational land uses would not involve the transport, use, disposal, or generation of hazardous materials.

Construction activities could involve the use of heavy equipment, which would contain fuels and oils, and various other products such as concrete, paints, and adhesives. However, the project contractor would be required to comply with all California Health and Safety Codes and local ordinances regulating the handling, storage, and transportation of hazardous and toxic materials. Pursuant to California Health and



Safety Code Section 25510(a), except as provided in subdivision (b),⁵ the handler or an employee, authorized representative, agent, or designee of a handler, shall, upon discovery, immediately report any release or threatened release of a hazardous material to the unified program agency (in the case of the proposed project, SJCEHD) in accordance with the regulations adopted pursuant to Section 25510(a). The handler or an employee, authorized representative, agent, or designee of the handler shall provide all State, city, or county fire or public health or safety personnel and emergency response personnel with access to the handler's facilities. In the case of the proposed project, the contractors are required to notify the SJCEHD in the event of an accidental release of a hazardous material, who would then monitor the conditions and recommend appropriate remediation measures.

Based on the above information impacts would be considered ***less than significant*** for the proposed project.

Mitigation Measure(s)

None required.

4.7-2 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. Based on the analysis below and with mitigation implemented, the impact is *less than significant*.

The objective of the ESA prepared for the proposed project was to identify RECs associated with the project site. As defined in the ASTM Standard Practice E1527-13, a REC is “the presence or likely presence of any hazardous substances or petroleum products in, on, or at a property: (1) due to release to the environment; (2) under conditions indicative of a release to the environment; or (3) under conditions that pose a material threat of a future release to the environment.”

As part of the records review for identifying RECs on the project site, the ESA incorporated findings from a Title Report for the project site (Appendix B of the ESA). A Title Report typically lists recorded land title details, ownership fees, leases, land contracts, easements, liens, deficiencies, and other encumbrances attached to or recorded against a subject property. A Title Report can supplement historical record sources. The Title Report provided for the project site as part of the ESA's review, does not note any references to environmental liens, deed restrictions, or other potential environmental issues. Additionally, the ESA's review of historic maps, aerial photos, and federal, tribal, State, and local databases did not return results for any known hazard or hazardous material on the project site. As noted above, while the search databases returned 13 results for facilities within the vicinity of the project site, the ESA concluded the 13 sites would be unlikely to pose an environmental risk.

Because the proposed project would consist of a residential development with public/quasi-public and recreational components, the proposed project is not

⁵ Subdivision (a) does not apply to a person engaged in the transportation of a hazardous material on a highway that is subject to, and in compliance with, the requirements of Sections 2453 and 23112.5 of the Vehicle Code.



anticipated to 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, as these types of land uses are not typically associated with the routine transport, use, disposal, or generation of substantial amounts of hazardous materials. In addition, as addressed under Impact 4.7-1, during construction of the proposed project, the project contractor would be required to comply with all California Health and Safety Codes and local ordinances regulating the handling, storage, and transportation of hazardous and toxic materials. Therefore, neither the construction or operation of the proposed project would generate a significant hazard through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment.

With respect to the project site's agricultural uses associated with the on-site vineyards, such uses could pose potential risks associated with organochlorine pesticides (OCPs). OCPs are a group of chlorinated compounds used as pesticides. OCPs can enter the environment after pesticide applications and can adhere to the soil and air, increasing the chances of high persistence in the environment. Exposure to pesticides has been concluded to increase the risk of hypertension, cardiovascular disorders, and other health-related problems in humans.⁶ As part of evaluating potential on-site risks associated with OCPs, ENGEO conducted an agrichemical assessment in which 100 soil samples were collected at depths ranging from zero to six inches below the ground surface and composited into 25 four-point samples. None of the samples tested positive for OCPs above applicable screening levels. As such, ENGEO concluded the project site does not appear to be adversely impacted from previous agricultural activities, and potential impacts related to OCPs would be less than significant.

Although wells or septic systems were not found within the project site during the reconnaissance, the ESA determined that both features could exist on-site, as multiple domestic wells are permitted for the site's southeast corner and two septic tanks were permitted for both the residence and the larger shop building. As noted in the Project Description chapter of this EIR, the project site is delineated by the site's "West Parcel," referring to the parcels to be developed to the west of Pillsbury Road, and the "East Parcel," the parcel to be developed to the east of Pillsbury Road. Only the East Parcel could contain wells and septic systems.

Private wells can be contaminated by both naturally occurring sources and by human activities.⁷ Septic tanks could include contaminants from previously generated wastewater from past uses of the project site. As such, a potential hazardous condition does exist on the East Parcel site related to the on-site well and septic systems. However, this risk only exists if during ground-disturbing activities associated with the proposed project there were to be a release of contaminants into the environment

⁶ National Center for Biotechnology Information, U.S. National Library of Medicine, National Institutes of Health. *Organochlorine pesticides, their toxic effects on living organisms and their fate in the environment*. Available at: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5464684/>. Accessed June 2022.

⁷ U.S. Environmental Protection Agency. *Potential Well Water Contaminants and Their Impacts*. Available at: <https://www.epa.gov/privatewells/potential-well-water-contaminants-and-their-impacts#:~:text=Heavy%20metals%20can%20contaminate%20private,water%20seepage%20and%20run%20Dof&text=Radionuclides%20can%20contaminate%20private%20wells,increase%20the%20risk%20of%20cancer.> Accessed February 2021.



through improper abandonment of the on-site wells or septic systems. Therefore, a ***potentially significant*** impact could occur if on-site wells or septic systems are not properly abandoned and demolished in the East Parcel.

Mitigation Measure(s)

Implementation of the following mitigation measures for the proposed project would reduce the above impact.

- 4.7-2(a) *Prior to any ground-disturbing activities, the project applicant shall hire a qualified geotechnical engineer to identify the location of any groundwater wells in the East Parcel. If groundwater wells are not found, further mitigation is not required. If groundwater wells are identified within the East Parcel, the project applicant shall hire a licensed well contractor to obtain a well abandonment permit from the SJCEHD for all on-site wells in the parcel, and properly abandon the on-site wells, pursuant to Department of Water Resources Bulletin 74-81 (Water Well Standards, Part III) for review and approval by the SJCEHD.*
- 4.7-2(b) *Prior to any ground-disturbing activities, the project applicant shall hire a qualified geotechnical engineer to identify the location of any septic systems in the East Parcel. If septic systems are not found, further mitigation is not required. If septic systems are identified in the East Parcel, the project applicant shall hire a licensed contractor to abandon any on-site septic system in compliance with applicable SJCEHD standards. Verification of abandonment shall be ensured by the SJCEHD.*

Level of Significance Following Mitigation

Implementation of Mitigation Measure 4.6-2(a) would ensure that a qualified geotechnical engineer identifies any groundwater wells in the East Parcel and that all identified wells are properly abandoned by a licensed well contractor through obtaining a well abandonment permit from the SJCEHD. Implementation of Mitigation Measure 4.7-2(b) would ensure that any on-site septic systems in the East Parcel are similarly abandoned with applicable SJCEHD standards. Implementation of the above mitigation measures would reduce all potentially significant project impacts associated with reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment to a *less-than-significant* level.

- 4.7-3 Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school or be located on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, create a significant hazard to the public or environment. Based on the analysis below, the impact is *less than significant*.**



The closest existing school to the project site would be the Manteca Unified School District's Walter E. Woodward Elementary School at 575 Tannehill Drive in Manteca. However, because the school is approximately 2,220 feet to the northwest of the nearest point of the project site, the proposed project would not be within one-quarter mile of an existing school.

However, the proposed project includes a proposed elementary/middle school, making the project site within one-quarter mile of a proposed school. The project site is not listed on the DTSC's Hazardous Waste and Substances Site List and is not located on a site that is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5. Therefore, the project site would not be expected to include existing hazardous conditions that would pose a significant impact to the proposed school. As addressed under Impact 4.7-1, during construction of the proposed project, the project contractor would be required to comply with all California Health and Safety Codes, such as Section 25510(a), as well as local ordinances, which combined, regulate the handling, storage, and transportation of hazardous and toxic materials. Therefore, the construction of the proposed project would not be expected to create a significant hazard through the release of hazardous materials into the environment within the project site, which includes the proposed school. During operation, the proposed project would not be anticipated to create a significant hazard to the proposed school, as the proposed project's residential, public/quasi-public, and recreational land uses are not typically associated with the routine transport, use, disposal, or generation of substantial amounts of hazardous materials.

As established by the ESA, existing surrounding land uses within the vicinity of the project site are unlikely to pose an environmental risk to the site. In the event that future land uses within one-quarter mile of the project site were to involve hazardous emissions or the handling of hazardous materials, such uses would be required to comply with all applicable federal, State, and local regulations regarding the use, storage, transport, handling, and disposal of hazardous materials. For example, if future land uses in the vicinity of the project site were to involve commercial land uses, then such commercial uses handling or storing of hazardous materials would be regulated by Chapter 6.95 of the California Health and Safety Code. This code section requires these types of commercial facilities to prepare a Hazardous Materials Business Plan and provide information to the local emergency response agency regarding the types and quantities of hazardous materials stored and provide emergency planning and response procedures in the event of a hazardous materials release. In the event that a facility stores quantities of specific acutely hazardous materials above the thresholds set forth by the California code, facilities are also required to prepare a Risk Management Plan and California Accidental Release Plan, which provides information on the potential impact zone of a worst-case release, and requires plans and programs designed to minimize the probability of a release and mitigate potential impacts.

Based on the above information, compliance with applicable federal, State, and local regulations regarding hazardous materials would ensure that future development within the project site would not pose a risk to the proposed school. Therefore, the proposed project would not emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school, and a **less-than-significant** impact would occur.



Mitigation Measure(s)

None required.

- 4.7-4 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. Based on the analysis below, there would be *no impact*.**

The ALUCP, which governs land uses and development adjacent to airports in San Joaquin County, covers Stockton Metropolitan Airport, Tracy Municipal Airport, Lodi Airport, Kingdon Airport, New Jerusalem Airport, and Lodi Airpark. The nearest airport to the project site is the Stockton Metropolitan Airport, which is located over eight miles north of the project site. Therefore, the project site is not within the ALUCP area and the proposed project would result in *no impact*.

Mitigation Measure(s)

None required.

- 4.7-5 Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan, expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires, or result in a significant impact related to being located in a State Responsibility Area or land classified as a very high fire hazard severity zone. Based on the analysis below, the impact is *less than significant*.**

Per CAL-FIRE, the County does not include a VHFHSZ. In addition, the project site is not located in or adjacent to a SRA. The nearest SRA is located approximately 13.3 miles southwest of the project site. As such, potential impacts related to being located within or adjacent to a VHFHSZ or SRA would not apply to the proposed project.

The City does not have an adopted emergency response plan. However, the proposed project would be required to comply with the Manteca General Plan, including policies set forth for adequate police patrol and emergency response. For example, Policy PF-I-23 requires that the Planning Commission and City Engineer review proposed residential developments to evaluate the accessibility for police patrols and emergency response. In addition, Policy PF-I-25 requires that the Planning Commission and City Engineer evaluate residential street patterns for accessibility of fire engines and emergency response. The proposed project's site plan, site design, and circulation, will be evaluated by the City prior to project approval as part of the project review process, and the proposed project will be required to comply with applicable City policies, including ensuring adequate emergency access.

The City's General Plan EIR states that the threat to the City from wildland fires is extremely low due to the agricultural lands surrounding the City. The project site's



surrounding land uses are residential and agricultural, with Woodward Park and Pillsbury Estates to the north, Evans Estates to the west, and orchard fields to the east and south. Accordingly, wildlands are not located within or adjacent to the project site, and the residential development to the north and west of the project site would limit wildfire risks.

Based on the above information, impacts related to interference with emergency response or emergency evacuation and wildland fires would be expected to be ***less than significant***.

Mitigation Measure(s)

None required.

Cumulative Impacts and Mitigation Measures

The following discussion of impacts is based on the implementation of the proposed project in combination with other proposed and pending projects in the region.

4.7-6 Increase the number of people who could be exposed to potential hazards associated with potentially contaminated soil and groundwater and an increase in the transport, storage, and use of hazardous materials through the development of the proposed project, combined with future buildout in the City. Based on the analysis below, the impact is *less than significant***.**

Impacts associated with hazardous materials are site-specific and generally do not affect, or are not affected by, cumulative development. Cumulative effects could be considered if the project was, for example, part of a larger development in which industrial processes would use hazardous materials. However, the proposed project will be a residential development with additional public/quasi-public and recreational components and will not involve industrial uses or any other uses that would involve hazardous materials or operations. As discussed above, project-specific impacts were found to be less than significant with the implementation of the recommended mitigation measures. In addition, surrounding development would be subject to the same federal, State, and local hazardous materials management requirements as the proposed project, which will minimize potential risks associated with increased hazardous materials use in the community, including potential effects, if any, on the project site. Therefore, implementation of the proposed project will have a ***less-than-significant*** impact associated with cumulative hazards and hazardous materials.

Mitigation Measure(s)

None required.



4.8 HYDROLOGY AND WATER QUALITY

4.8 HYDROLOGY AND WATER QUALITY

4.8.1 INTRODUCTION

This chapter of the EIR describes existing drainage patterns on the project site, including current stormwater flows and stormwater infrastructure. The chapter also evaluates potential impacts of the proposed project with respect to changes in on-site drainage patterns, degradation of water quality, changes in groundwater levels, and increases in on- and off-site flooding. Information used for this chapter was primarily drawn from the City of Manteca General Plan,¹ the City of Manteca General Plan EIR,² the City of Manteca 2013 Storm Drain Master Plan (SDMP),³ and the City of Manteca Storm Water Management Program (SWMP).⁴

In response to the Notice of Preparation (NOP), the City received comments related to hydrology and water quality regarding adequate water supply and quality to serve the proposed project; aging existing infrastructure that protect the City from flooding, such as levees; compliance with the Antidegradation Policy and Antidegradation Implementation Policy set forth by the Central Valley Regional Water Quality Control Board (RWQCB); and compliance with applicable National Pollutant Discharge Elimination System (NPDES) permits and the RWQCB's Waste Discharge Requirements (WDRs) for dewatering.

CEQA Guidelines Section 15083 notes that comments received during the NOP scoping process can be helpful in "identifying the range of actions, alternatives, mitigation measures, and significant effects to be analyzed in depth in an EIR and in eliminating from detailed study issues found not to be important." Neither the CEQA Guidelines nor Statutes require a lead agency to respond directly to comments received in response to the NOP, but they do require the comments be considered. Consistent with these requirements, these comments have been carefully reviewed and considered by the City of Manteca and are reflected in the analysis of impacts in this chapter. Appendix B includes all NOP comments received.

4.8.2 EXISTING ENVIRONMENTAL SETTING

The following setting information provides an overview of the existing conditions of the project site and surrounding area in relation to hydrology and water quality.

Regional Hydrology

The City of Manteca is located approximately 10 to 50 feet above mean sea level, between Lone Tree Creek to the north and the Stanislaus River to the south, with the San Joaquin River, which serves as the major drainage feature in the area, approximately four miles to the southwest and west. French Camp Slough is a tributary to the San Joaquin River and flows to the north of the City, to the south of the Stockton Metropolitan Airport. The South San Joaquin Irrigation District (SSJID) owns a complex network of irrigation laterals and drains that run throughout the City

¹ City of Manteca. *Manteca General Plan 2023 Policy Document*. October 6, 2003..

² City of Manteca. *City of Manteca General Plan 2023 Environmental Impact Report*. Certified October 6, 2003.

³ City of Manteca. *Storm Drain Master Plan*. Available at: <https://www.ci.manteca.ca.us/Engineering/Pages/default.aspx>. Accessed January 2021.

⁴ City of Manteca. *Storm Water Management Program*. Available at: <https://www.ci.manteca.ca.us/Engineering/Pages/default.aspx>. Accessed January 2021.



limits. The laterals and drains deliver irrigation water to various farming operations, and convey excess irrigation water and field runoff to downstream drains. Eventually, the water is conveyed to a large central drain called the French Camp Outlet Canal, from which flows ultimately convey to the San Joaquin River.

The backbone of the City's storm drainage system is based on a long-standing relationship with the SSJID, which permits the City to use SSJID drains and laterals. Under the partnership, the SSJID owns the drains and laterals and the City's Public Works Department operates and maintains the drainage system. The relationship was formalized through a 2006 agreement that allows the City to use the SSJID facilities through 2026; however, the City's use of the SSJID facilities is also limited to available capacity, which must be maintained to allow for drains to convey runoff from irrigation flows. The City relies on the SSJID facilities to convey stormwater runoff to the San Joaquin River and plans to continue to do so through buildout of the City's General Plan. A master plan of the City's storm drain system was adopted in 2006 in order to forecast needs of the system as established in the General Plan. An updated master plan, the City's 2013 SDMP, was subsequently prepared and adopted.

The region's natural drainage is vulnerable to meteorological events, such as intense precipitation, which can cause flooding. In addition, seasonal snowmelt from the Sierra Nevada mountain range to the east contributes to the volume of water in the local hydrologic system. Urbanization contributes to an increased volume in the hydrologic system by increasing impervious surfaces, which do not allow for infiltration of water into the soil, and thereby, results in increased velocities and volumes of stormwater runoff.

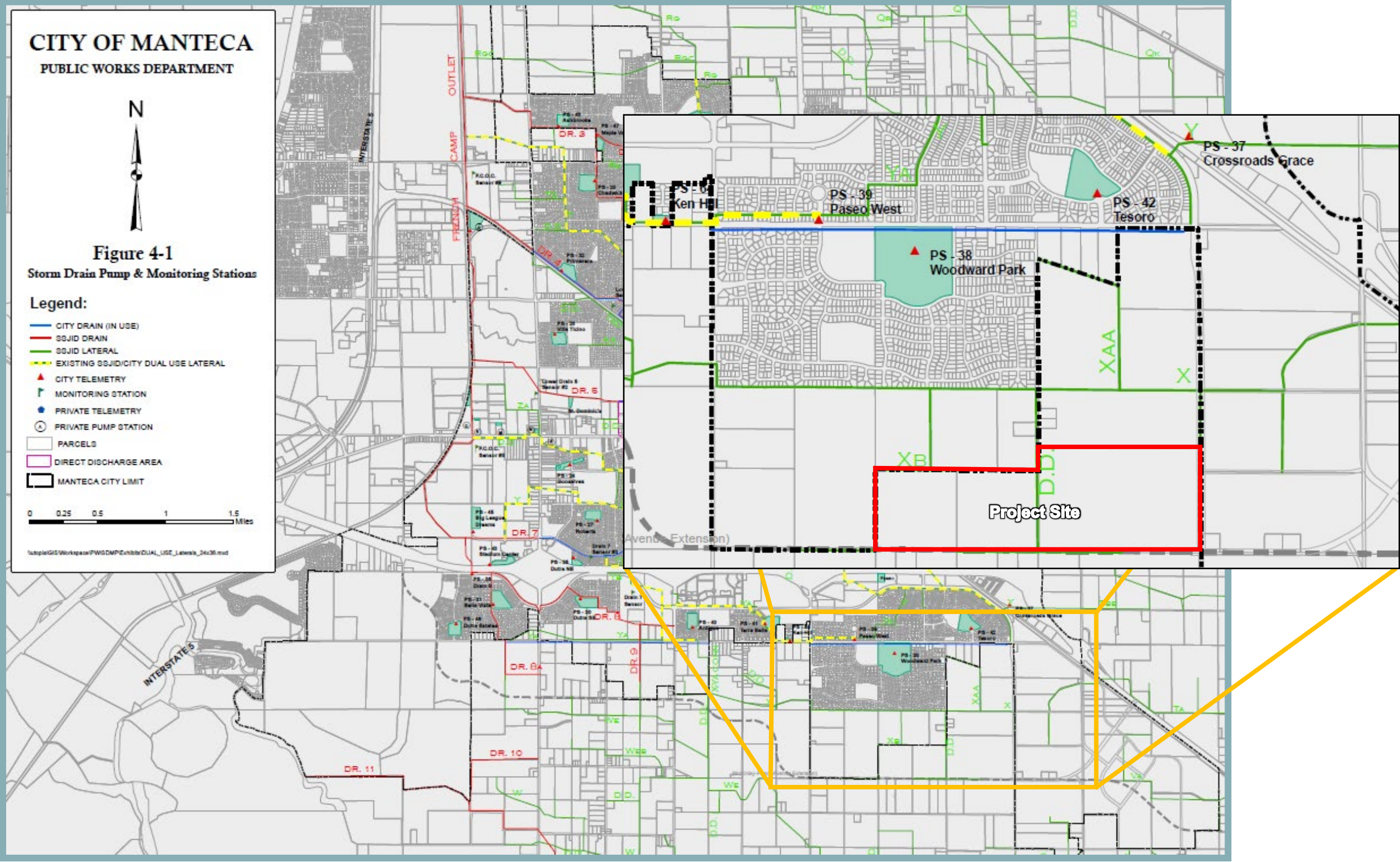
Project Site and Local Drainage

To avoid exceeding the carry capacity of SSJID facilities, drainage basins are located throughout the City to help provide storage and attenuation for storm drainage flows prior to being pumped into SSJID facilities. Some of the basins also delay releasing water for a longer period to further reduce the potential of downstream flooding. Most detention basins are joint-use facilities such as parks that provide recreation and other uses in addition to stormwater detention. Detention basins typically provide some form of quality treatment for stormwater prior to the water being pumped into SSJID laterals and drains. The system also includes pump stations, which are sized according to City design criteria and controlled by water levels in downstream drains. At the time of the SDMP's adoption in 2013, 10 water level monitoring stations existed throughout the City's storm drainage system to obtain real-time water level measurements at critical flow points in the system to prevent flooding. Additionally, the SDMP details the City's use of a Supervisory Control and Data Acquisition (SCADA) system to remotely monitor and control storm drainage pump stations and water level monitoring stations.

Figure 4.8-1 illustrates the City's existing storm drainage system as detailed in the SDMP, including the locations of existing detention basins (the areas indicated in turquoise), pump stations, and water level monitoring stations. As shown in the Figure 4.8-1, Lateral Dd is within the project site.



Figure 4.8-1
City of Manteca Storm Drain Pump and Monitoring Stations



In addition, as shown in Figure 4.8-2, the project site is located within Drainage Zone 36, in the South Drain storm drain subshed area. The South Drain subshed is bound by the City limits to the west and south, State Route (SR) 120 to the north and extends past SR 99 to the east. As development within the southeastern portion of the City limits replaced land previously used for agricultural operations with single-family residential communities, storm drain facilities were also expanded to such areas. Currently, runoff from development in the South Drain subshed area, which includes the Pillsbury Estates, Woodward Park, and Evans Estates communities, is captured by detention basins that have been incorporated into the neighborhood parks within the aforementioned communities. Flows are temporarily detained before being metered to the existing storm drain pipe infrastructure, located within the neighborhood roadways, whereby they are then released to the existing storm drain line in Woodward Avenue. As agricultural lands within the City's Sphere of Influence (SOI) are developed in the future, such projects will be required to ensure that new storm drainage infrastructure necessary for capturing and conveying flows is extended south of the City limits, in accordance with applicable standards set forth in the *Multi-Agency Post-Construction Stormwater Standards Manual*, which is a collaboration between the cities of Lathrop, Lodi, Manteca, Patterson, and Tracy, as well as portions of unincorporated San Joaquin County.⁵ Future drainage improvements that would occur as part of buildout of the General Plan planning area, pursuant to the SDMP, are shown in Figure 4.8-3.

With respect to existing floodplains, the Federal Emergency Management Agency (FEMA) categorizes flood-prone areas based on the frequency of flood occurrence. The primary flood hazard in the City's vicinity is the San Joaquin River, which is located approximately six miles west of the project site, as well as the river's tributaries, including Walthall Slough along the southwestern border of the City's planning area. A levee under the jurisdiction of Reclamation District 17 and located between Williamson Road to Airport Way provides flood protection for the land north and east of Walthall Slough, including the project site approximately three miles northeast of the levee. Areas subject to inundation in the event of dam failure would generally coincide with the 100-year floodplain area. As shown in Figure 4.8-4 below, the project site is within a FEMA-designated Area of Minimal Flood Hazard (Zone X), which is an area outside of Special Flood Hazard Areas (SFHAs) and elevated above the 500-year floodplain.

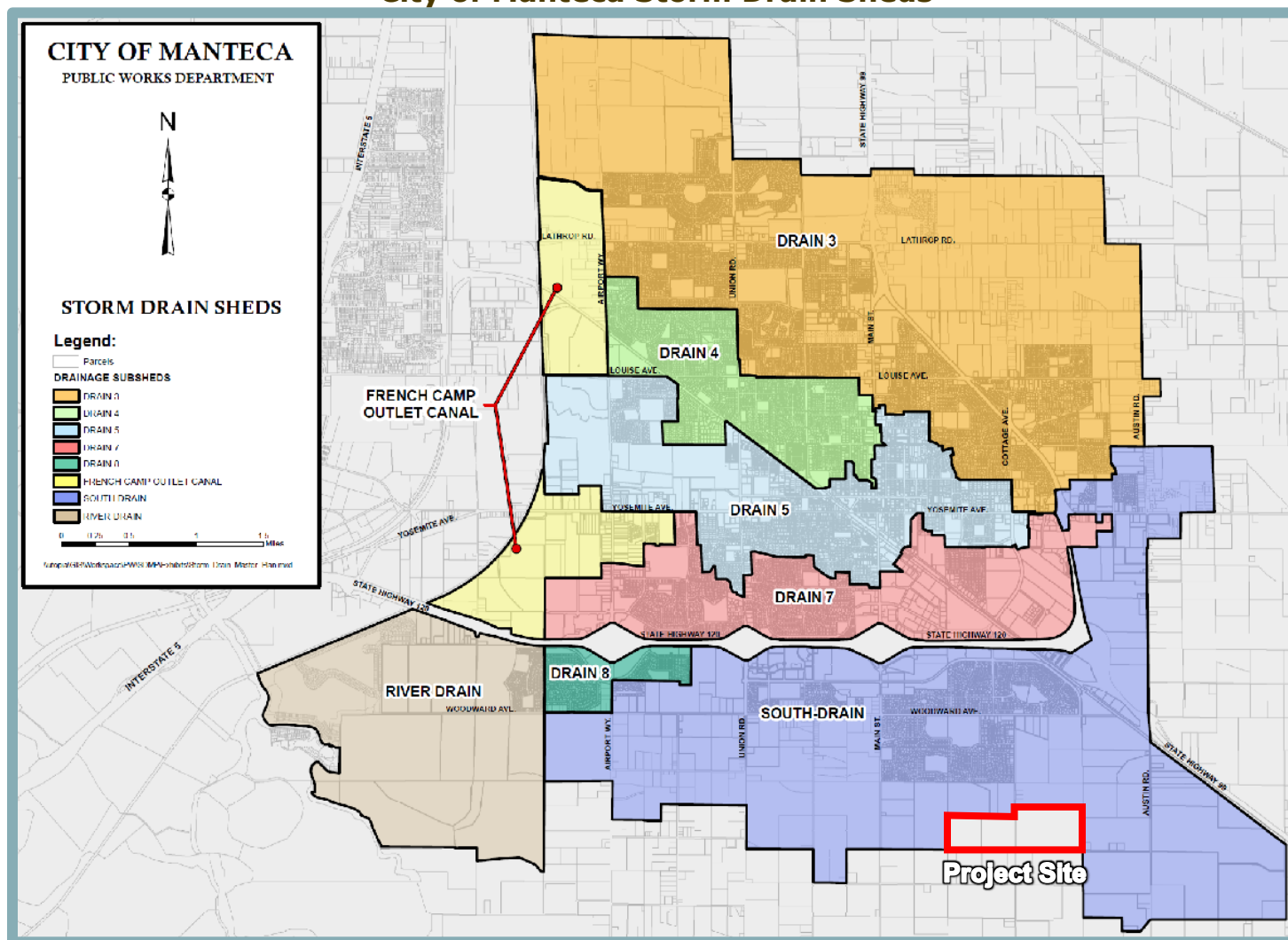
Water Quality

Water is essential to recreation, the viability of agriculture, and the development of housing, commerce, and industry, as well as the maintenance of high-quality fish and wildlife habitats. Land uses and activities that the City must consider in protecting the quality of the City's water include construction activities, agricultural land uses, dairies, and urban runoff. The City is classified as a Phase II MS4 city by the State Water Resources Control Board (SWRCB). Accordingly, the City and any new development within it is required to comply with the water quality limitations set forth in the SWRCB's statewide NPDES Phase II MS4 General Permit, discussed further in the Regulatory Context section. As part of compliance with the Phase II MS4 General Permit, developers are required to use water quality treatment principles and Best Management Practices (BMPs) in the design of stormwater facilities, including Low Impact Development (LID) principles and techniques. Use of LID principles and techniques help to improve water quality, reduce peak discharges to SSJID laterals, help meet the requirements of the City's stormwater NPDES MS4 General Permit, and is required in the City's General Plan.

5 Cities of Lathrop, Lodi, Manteca, Patterson, and Tracy, San Joaquin County. *Multi-Agency Post-Construction Stormwater Standards Manual*. June 2015.



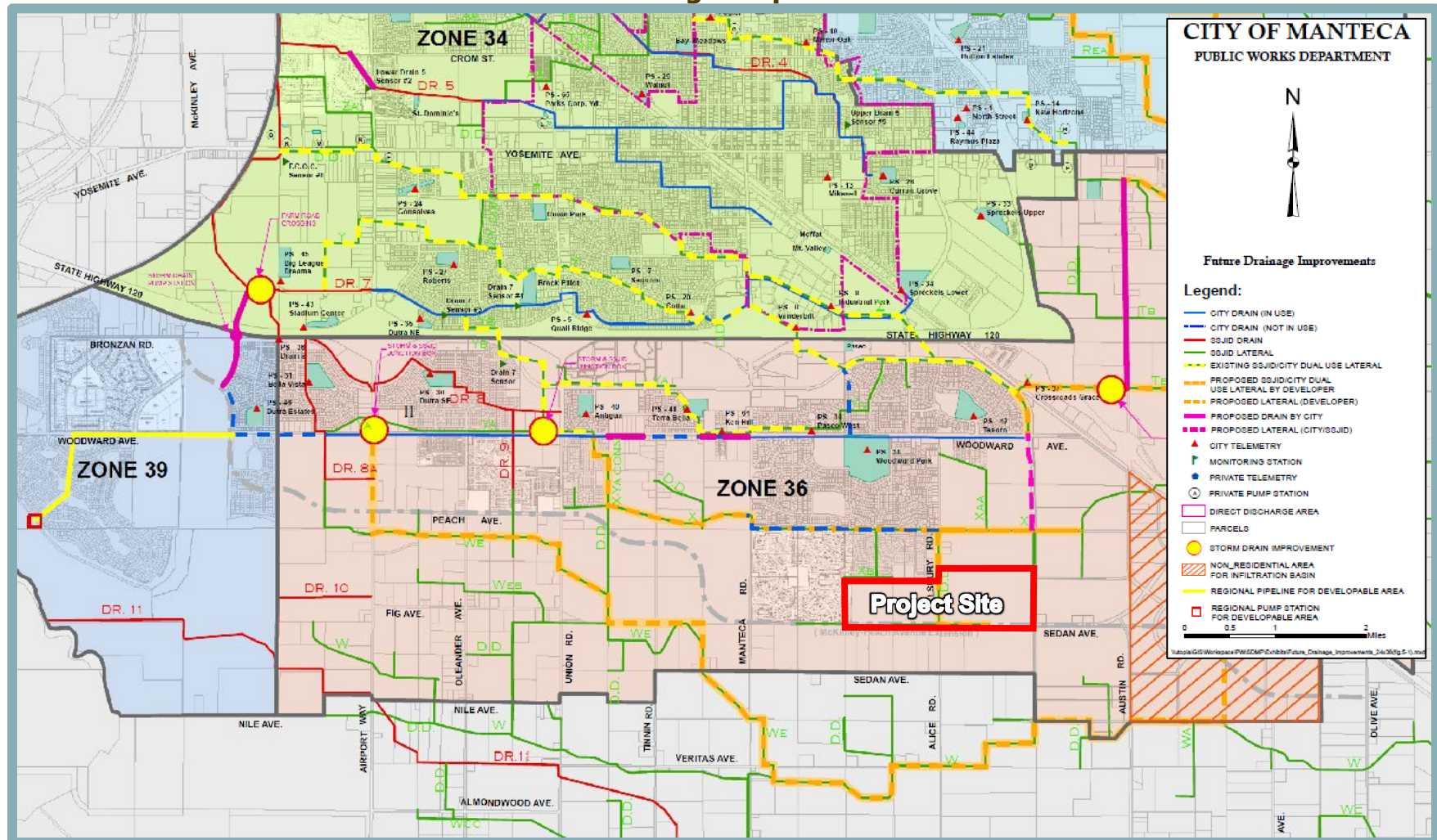
**Figure 4.8-2
 City of Manteca Storm Drain Sheds**



Source: City of Manteca. Storm Drain Master Plan. March 2013.



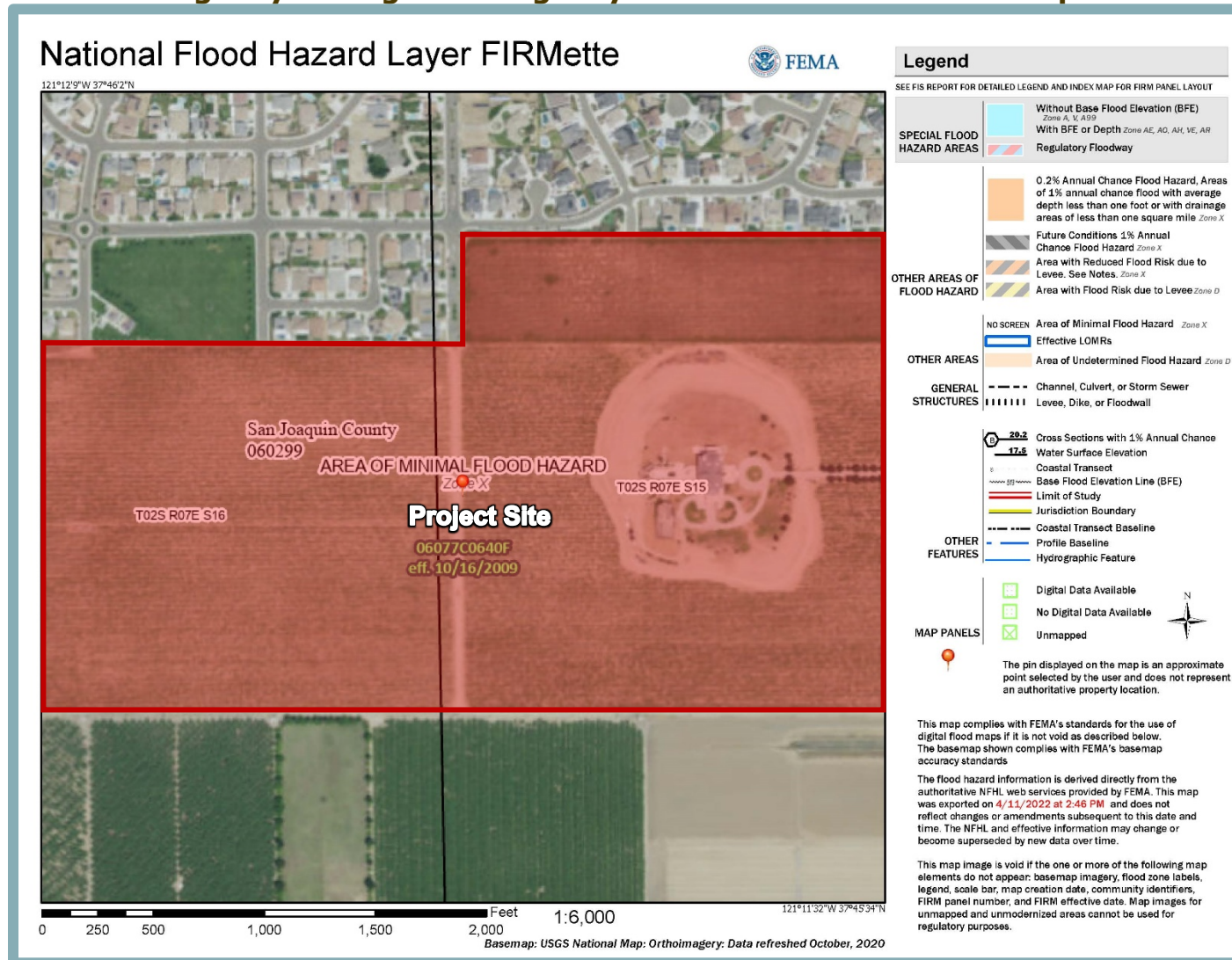
**Figure 4.8-3
Future Drainage Improvements**



Source: City of Manteca. Storm Drain Master Plan. March 2013.



**Figure 4.8-4
Federal Emergency Management Agency – Flood Insurance Rate Map Flood Areas**



Groundwater

The City provides 48 percent of its potable water supply through groundwater. The City operates a system of wells interconnected with a transmission/distribution pipe system to deliver the water to be treated and then dispersed to consumers. The City's groundwater supply is pumped from groundwater resources, which consist of 38 square miles of the Eastern San Joaquin County Groundwater Subbasin (ESJCGS), a subbasin of the San Joaquin Valley Groundwater Basin. The ESJCGS is bounded by the Mokelumne River to the north, the Stanislaus River to the south, the San Joaquin River to the west, and bedrock to the east. The groundwater supply is indirectly affected by annual rainfall, and a multiple-year drought could decrease groundwater supplies. Despite the possibility, groundwater supplies have been available at a consistent level.

Water levels in the area are maintained by the proximity of the Delta channels to the west of the city limits. Typically, groundwater recharge comes from irrigation of agricultural lands surrounding the City and infiltration from streams flowing west out of the Sierra Nevada. Such groundwater recharge occurs in areas with permeable materials that allow the infiltration of water along streams, alluvial fans, and foothill areas. The City's General Plan area includes a variety of soil types that provide percolation to groundwater; however, streams or alluvial fans do not exist within the City's General Plan area. Thus, notable groundwater recharge areas are not identified within the General Plan area. Groundwater levels are relatively high throughout the City, and according to the City's General Plan EIR, the City's wells produce groundwater that meets or exceeds the State Department of Health Services recommended drinking water quality standards. As the groundwater quality in the City is very good, minimal treatment is required. Additional information and analysis on groundwater supply and quality can be found in Chapter 4.11, Public Services, Recreation, Utilities, and Service Systems, of this EIR.

4.8.3 REGULATORY SETTING

The following federal, State, and local environmental laws and policies are relevant to the review of hydrology and water quality under the CEQA process.

Federal Regulations

The following federal environmental laws and policies are relevant to hydrology and water quality.

Clean Water Act of 1977 (CWA)

The federal Clean Water Act (CWA) (33 U.S. Code [U.S.C.] Sections 1251 et seq.) establishes the basic structure for regulating discharges of pollutants into surface waters of the U.S., and sets water quality standards for all contaminants in surface waters. Water quality standards are intended to protect public health, enhance the quality of water, and serve the purposes of the CWA. The CWA defines water quality standards as federal or state provisions or laws that designate the beneficial uses of water and establish water quality criteria to protect those designated uses.

National Pollutant Discharge Elimination System

The NPDES permit system was established in the federal CWA to regulate municipal and industrial discharges to surface waters of the U.S. Each NPDES permit contains limits on allowable concentrations and mass emissions of pollutants contained in the discharge. Sections 401 and 402 of the CWA contain general requirements regarding NPDES permits. Section 307 of the CWA describes the factors that the U.S. Environmental Protection Agency (USEPA) must consider in setting effluent limits for priority pollutants.



Nonpoint sources are diffuse and originate over a wide area rather than from a definable point. Nonpoint pollution often enters receiving water in the form of surface runoff, but is not conveyed by way of pipelines or discrete conveyances. As defined in the federal regulations, such nonpoint sources are generally exempt from federal NPDES permit program requirements. However, two types of nonpoint source discharges are controlled by the NPDES program – nonpoint source discharge caused by general construction activities, and the general quality of stormwater in municipal stormwater systems. The 1987 amendments to the CWA directed the USEPA to implement the stormwater program in two phases. Phase I addresses discharges from large (population 250,000 or above) and medium (population 100,000 to 250,000) municipalities and certain industrial activities. Phase II addresses all other discharges defined by USEPA that are not included in Phase I.

NPDES Construction General Permit

Section 402 of the CWA mandates that certain types of construction activities comply with the requirements of the NPDES stormwater program. The Phase II Rule, issued in 1999, requires that construction activities that disturb land equal to or greater than one acre require permitting under the NPDES program. In California, permitting occurs under the General Permit for Stormwater Discharges Associated with Construction Activity (Construction General Permit), issued to the SWRCB and implemented and enforced by the nine RWQCBs.

As of July 1, 2010, all dischargers with projects that include clearing, grading or stockpiling activities expected to disturb one or more acres of soil are required to obtain compliance under the NPDES Construction General Permit Order 2009-0009-DWQ, as amended by Order 2012-0006-DWQ. The Construction General Permit requires all dischargers, where construction activity disturbs one or more acres, to take the following measures:

1. Develop and implement a Storm Water Pollution Prevention Plan (SWPPP) to include a site map(s) of existing and proposed building and roadway footprints, drainage patterns and storm water collection and discharge points, and pre- and post- project topography;
2. Describe types and placement of BMPs in the SWPPP that will be used to protect storm water quality;
3. Provide a visual and chemical (if non-visible pollutants are expected) monitoring program for implementation upon BMP failure; and
4. Provide a sediment monitoring plan if the area discharges directly to a water body listed on the 303(d) list for sediment.

To obtain coverage under the Construction General Permit, an applicant must file a Notice of Intent (NOI) and a SWPPP must be submitted to the RWQCB electronically. A copy of the SWPPP must also be submitted to the City of Manteca. When project construction is completed, the applicant must file a Notice of Termination (NOT).

NPDES Phase II Small Municipal Separate Storm Sewer System (MS4) General Permit

The Central Valley RWQCB issued the NPDES General Permit No. CAS000004 Waste Discharge Requirements for Stormwater Discharges from Small Municipal Separate Storm Sewer Systems, which became effective on July 1, 2013. An “MS4” is a conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, man-made channels, or storm drains): (i) designed or used for collecting or conveying stormwater; (ii) which is not a combined sewer; and (iii) which is not part of a Publicly Owned Treatment Works



(POTW). The City of Manteca is a Phase II MS4 permittee. Projects subject to the requirements of the Phase II MS4 NPDES permit must submit the appropriate Post-Construction Stormwater Plan based on the project type/development category. Regulated Projects include projects that create or replace 5,000 square feet (sf) or more of impervious surface. Regulated Projects that create and/or replace one or more acres of impervious surface are considered regulated hydromodification management projects. The proposed project would create more than one acre of impervious area, and, thus, is considered a Regulated Hydromodification Management Project subject to Phase II MS4 NPDES permit post-construction stormwater treatment requirements.

Regulated Projects are required to divide the project area into Drainage Management Areas (DMAs) and implement and direct water to appropriately-sized Site Design Measures (SDMs) and Baseline Hydromodification Measures to each DMA to the Maximum Extent Practicable (MEP). Regulated Projects must additionally include Source Control BMPs where possible. SDMs and Baseline Hydromodification Measures include, but are not limited to:

- Rooftop and impervious area disconnection;
- Porous pavement;
- Rain barrels and cisterns;
- Vegetated swales;
- Bio-retention facilities;
- Green roofs; or
- Other equivalent measures.

A detailed description of the hydromodification requirements that would apply to applicable projects within the city limits or projects proposed to be annexed into the city limits is included in the Multi-Agency Post-Construction Stormwater Standards Manual,⁶ of which the City was a collaborator.

Federal Emergency Management Agency

FEMA was established in 1979 by Executive Order 12127 by President Carter. The agency was given the dual mission of emergency management and civil defense. Since then, FEMA authorities have been further defined and expanded through various federal laws (e.g., The Stafford Act, etc.) The FEMA is responsible for determining flood elevations and floodplain boundaries based on U.S. Army Corps of Engineers (USACE) studies, among other things. The boundaries of the 100-year floodplain are delineated by FEMA on the basis of hydrology, topography and modeling during predicted rainstorms. Areas designated as flood zones are shown on published Flood Insurance Rate Maps (FIRMs), which FEMA is also responsible for distributing, that are used in the National Flood Insurance Program (NFIP). FIRM maps identify the locations of special flood hazard areas, including the 100-year floodplains. The NFIP requires owners of property within designated flood zones to purchase flood insurance.

FEMA allows non-residential development in the floodplain; however, construction activities are restricted within the flood hazard areas, depending upon the potential for flooding within each area. Federal regulations governing development in a floodplain are set forth in Title 44, Part 60 of the Code of Federal Regulations (CFR). These standards are implemented at the State level

⁶ Cities of Lathrop, Lodi, Manteca, Patterson, and Tracy, San Joaquin County. *Multi-Agency Post-Construction Stormwater Standards Manual*. June 2015.



through construction codes and local ordinances; however, these regulations only apply only to structural improvements (i.e., homes, barns).

Although roadway construction or modification is not explicitly addressed in the FEMA regulations, the California Department of Transportation (Caltrans) has also adopted criteria and standards for roadway drainage systems and projects situated within designated floodplains. Standards that apply to floodplain issues are based on federal regulations (Title 23, Part 650 of the CFR). At the State level, roadway design must comply with drainage standards included in Chapters 800-890 of the Caltrans Highway Design Manual.

CFR Section 60.3(c)(10) restricts cumulative development from increasing the water surface elevation of the base flood by more than one foot within the floodplain.

State Regulations

The following State environmental laws and policies are relevant to hydrology and water quality.

State Water Resources Control Board

The SWRCB and the RWQCB are responsible for ensuring implementation and compliance with the provisions of the federal CWA and California's Porter-Cologne Water Quality Control Act (Cal. Water Code sections, et seq.). The project site is situated within the jurisdiction of the Central Valley region of the RWQCB (Region 5). The Central Valley RWQCB has the authority to implement water quality protection standards through the issuance of permits for discharges to waters at locations within the Central Valley RWQCB's jurisdiction.

Central Valley Regional Water Quality Control Board

As authorized by the Porter-Cologne Water Quality Control Act, the Central Valley RWQCB primary function is to protect the quality of the waters within its jurisdiction for all beneficial uses. State law defines beneficial uses of California's waters that may be protected against quality degradation to include, but not be limited to: domestic; municipal; agricultural and industrial supply; power generation; recreation; aesthetic enjoyment; navigation; and preservation and enhancement of fish, wildlife, and other aquatic resources or preserves.

The Central Valley RWQCB implements water quality protection measures by formulating and adopting water quality control plans (referred to as basin plans, as discussed below) for specific groundwater and surface water basins, and by prescribing and enforcing requirements on all agricultural, domestic, and industrial waste discharges. The Central Valley RWQCB oversees many programs to support and provide benefit to water quality, including the following major programs: Agricultural Regulatory; Above-Ground Tanks; Basin Planning; CALFED; Confined Animal Facilities; Landfills and Mining; Non-Point Source; Spills, Leaks, Investigations, and Cleanups (SLIC); Stormwater; Total Maximum Daily Load (TMDL); Underground Storage Tanks (UST), Wastewater Discharges (including the NPDES); Water Quality Certification; and Watershed Management.

The Central Valley RWQCB is responsible for issuing permits for a number of varying activities. Activities subject to the Central Valley RWQCB permitting requirements include stormwater, wastewater, and industrial water discharge, disturbance of wetlands, and dewatering. Permits issued and/or enforced by the Central Valley RWQCB include, but are not limited to, the NPDES Construction General Permit, NPDES Municipal Stormwater Permits, Industrial Stormwater General Permits, Clean Water Act Section 401 and 404 Permits, and Dewatering Permits.



Basin Plans and Water Quality Objectives

The Porter-Cologne Water Quality Control Act provides for the development and periodic review of water quality control plans (basin plans) that are prepared by the regional water quality control boards. Basin plans designate beneficial uses of California's major rivers and groundwater basins, and establish narrative and numerical water quality objectives for those waters. Beneficial uses represent the services and qualities of a water body (i.e., the reasons why the water body is considered valuable), while water quality objectives represent the standards necessary to protect and support those beneficial uses. Basin plans are primarily implemented through the NPDES permitting system and by issuing waste discharge regulations to ensure that water quality objectives are met.

Basin plans provide the technical basis for determining waste discharge requirements and taking regulatory enforcement actions if deemed necessary. The proposed project site is located within the jurisdiction of the Central Valley RWQCB. A basin plan has been adopted for the Sacramento and San Joaquin River Basin (Basin Plan). The City's wells are located in the ESJCGS, which is a subbasin of the San Joaquin Valley Groundwater Basin. The San Joaquin Valley Groundwater Basin, lies within the San Joaquin River Hydrologic Region.

The Basin Plan sets water quality objectives for the surface waters in its region for the following substances and parameters: ammonia, bacteria, biostimulatory substances, chemical constituents, color, dissolved oxygen, floating material, oil and grease, pH, radioactivity, salinity, sediment, settleable material, suspended material, taste and odor, temperature, toxicity, turbidity, and pesticides. For groundwater, water quality objectives applicable to all groundwater have been set for bacteria, chemical constituents, radioactivity, taste, odors, and toxicity.

Sustainable Groundwater Management Act

In 2014, Governor Jerry Brown signed into law a three-bill legislative package, composed of Assembly Bill (AB) 1739 (Dickinson), Senate Bill (SB) 1168 (Pavley), and SB 1319 (Pavley), collectively known as the Sustainable Groundwater Management Act (SGMA). The SGMA provides the State a framework for sustainable, groundwater management. The State Department of Water Resources (DWR) has developed a Strategic Plan for its Sustainable Groundwater Management (SGM) Program. DWR's SGM Program will implement the new and expanded responsibilities identified in the 2014 SGMA. The expanded responsibilities include the following:

- 1) Developing regulations to revise groundwater basin boundaries;
- 2) Adopting regulations for evaluating and implementing Groundwater Sustainability Plans (GSPs) and coordination agreements;
- 3) Identifying basins subject to critical conditions of overdraft;
- 4) Identifying water available for groundwater replenishment; and
- 5) Publishing best management practices for the sustainable management of groundwater.

The SGMA applies to the 127 High and Medium Priority groundwater basins, which account for approximately 96 percent of groundwater use in California and requires governments and water agencies of high and medium priority basins to halt overdraft and bring groundwater basins into balanced levels of pumping and recharge. Under SGMA, such basins should reach sustainability within 20 years of implementing their sustainability plans. Critically overdrafted basins should reach sustainability by 2040. For the remaining high and medium priority basins, the deadline to reach sustainability is 2042. The SGMA requires the formation of local groundwater sustainability agencies (GSAs) that must assess conditions in their local water basins and adopt locally based



management plans. The SGMA provides substantial time (20 years) for GSAs to implement plans and achieve long-term groundwater sustainability. The SGMA protects existing surface water and groundwater rights and does not impact current drought response measures.

The City of Manteca elected to become a GSA, within the City boundaries, in December 2016. In March 2017, the City via a Joint Exercise of Powers Agreement, elected to join the Eastern San Joaquin Groundwater Joint Powers Authority (Groundwater Authority) to participate in the development of the Groundwater Authority's GSP. The Groundwater Authority consists of 16 member agencies, including representatives from the City of Stockton, City of Lodi, San Joaquin County, SSJID, and other mutual water companies located within the ESJCGS. The ESJCGS has been in an overdraft condition for many years. The Groundwater Authority adopted a GSP in 2019.⁷

Local Regulations

The following local environmental laws and policies are relevant to hydrology and water quality.

City of Manteca General Plan

The following goals and policies of the City's General Plan are applicable to the hydrology and water quality aspects of the proposed project:

Major Drainage

Goal PF-9 Maintain an adequate level of service in the City's drainage system to accommodate runoff from existing and projected development and to prevent property damage due to flooding.

Policy RF-P-27 The City shall require the dedication and improvement of drainage detention basins as a condition of development approval according to the standards of the Drainage Master Plan. The responsibility for the dedication and improvement of detention basins shall be based on the prorated share of stormwater runoff resulting from each development.

Policy PF-P-28 Storm drainage systems within new development areas shall include open drainage corridors where feasible to supplement or replace an underground piped drainage system. The drainage systems would provide for short-term storm water detention, storm water conveyance for storm waters exceeding a 10-year event, storm water quality treatment, bike and pedestrian paths, and visual open space within neighborhoods. The width and length of the corridors would be determined by the stormwater management requirements. The drainage systems would provide a pedestrian connection between parks and access to open space from residential neighborhoods. The neighborhoods would be designed with homes oriented to, rather than backing on the open space corridor.

⁷ Eastern San Joaquin Groundwater Authority. *Eastern San Joaquin Groundwater Subbasin Groundwater Sustainability Plan*. November 2019.



- Policy PF-I-13 The City shall update the Storm Drainage Master Plan and Public Facilities Implementation Plan, regarding water supply and distribution, every five years. The update shall be reviewed annually for adequacy and consistency with the General Plan.

Water Conservation

Goal RC-1 Minimize the consumption of water to reasonable levels consistent with a high level of amenities and quality of life for City residents and visitors.

Goal RC-2 Maximize the beneficial uses of water by recycling water for irrigation and other non-potable uses.

Policy RC-P-1 The City shall continue to implement water conservation standards for all commercial and industrial development, and for all existing and new residential development.

Policy RC-P-2 The City shall explore potential uses of treated wastewater when such opportunities become available.

Policy RC-P-3 The City shall protect the quantity of Manteca's groundwater.

Policy RC-P-4 The City shall require water conservation in both City operations and private development to minimize the need for the development of new water sources.

Policy RC-P-5 Development of private water wells within the city limits shall be allowed only where the City makes a finding that municipal water service is not readily and feasibly available, and such private well systems shall only be allowed to be used until such time as City water service becomes available.

Policy RC-I-1 Continue to implement standards for water conserving landscape practices, including the use of drought tolerant plants, for both public and private projects.

Policy RC-I-4 Cooperate with other agencies and jurisdictions to expand water conservation programs, and to develop methods of water reuse.

Soils and Erosion Control

Goal RC-6 Preserve and maintain Manteca's soils to avoid pollution of surface waters, decreased air quality, and loss of soil.

Policy RC-P-10 Minimize soil erosion and loss of topsoil from land development activities, wind, and water flow.



- Policy RC-I-16 All new development shall comply with the Uniform Building Code (UBC) requirements for specific site development and construction standards for specific soil types.⁸
- Policy RC-I-17 All new development shall comply with the Uniform Building Code (UBC), Chapter 70, regulating grading activities including drainage and erosion control.⁹
- Policy RC-I-18 Require site-specific land management and development practices for proposed development projects, including appropriate mitigation measures for avoiding or reducing erosion.

Water Quality

Goal RC-7 To protect water quality in the San Joaquin River and in the area's groundwater basin.

- Policy RC-P-11 Minimize sedimentation and loss of topsoil from soil erosion.
- Policy RC-P-12 Minimize pollution of waterways and other surface water bodies from urban runoff.
- Policy RC-P-13 Protect the quality of Manteca's groundwater.
- Policy RC-P-14 Encourage participation by the County and surrounding communities in a basin-wide groundwater management study.
- Policy RC-P-15 Once sewer service has been extended to incorporated areas, new septic tanks shall not be permitted.
- Policy RC-I-19 The City shall work with the County and surrounding communities to develop an action plan and/or to create an agency to manage and protect local and regional groundwater resources.
- Policy RC-I-22 Maintain a buffer area between waterways and urban development to protect water quality and riparian areas.
- Policy RC-I-23 Utilize cost-effective urban runoff controls, including Best Management Practices (BMPs), to limit urban pollutants from entering the water courses.
- Policy RC-I-24 Comply with the Regional Water Quality Control Board's regulations and standards to maintain and improve groundwater quality in Manteca.

⁸ The final edition of the UBC was published in 1997, and has since been replaced by the International Building Code. Section 1636 of the 1997 UBC provides definitions for soil profile types.

⁹ The 1997 edition of the UBC addresses excavation and grading activities in Appendix Chapter 33.



Flooding

Goal S-3	Prevent loss of lives, injury, and property damage due to flooding.
Goal S-4	Pursue flood control solutions that minimize environmental impacts.
Policy S-P-7	Regulate all uses and development in areas subject to potential flooding through zoning and other land use regulations.
Policy S-P-8	Cooperate with other agencies in the pursuit of a regional approach to flood issues.
Policy S-P-9	Combine flood control, recreation, water quality, and open space functions where feasible.
Policy S-P-10	Ensure that any existing structures subject to the 100-year flood provide adequate protection from flood hazards.
Policy S-P-11	Ensure that the impacts of potential flooding are adequately analyzed when considering areas for future urban expansion.
Policy S-P-12	New residential development, including mobile homes, shall be constructed so that the lowest floor is at least one foot above the 100-year flood level.
Policy S-P-13	Non-residential development shall be anchored and flood-proofed in accord with the Federal Emergency Management Agency (FEMA) standards to prevent damage or causing damage due to a 100-year flood or, alternatively, elevated to at least one foot above the 100-year flood level. When improvements to existing development are made costing at least 50 percent of the current market value of the structure before improvements, the structure shall be brought into compliance with FEMA standards.
Policy S-I-4	The City shall continue to participate in the National Flood Insurance Program. To this end, the City shall ensure that local regulations are in full compliance with standards adopted by the Federal Emergency Management Agency (FEMA). The City shall adopt and implement local flood management development standards.
Policy S-I-6	Discourage large continuous paved areas unless provided with engineered drainage facilities.
Policy S-I-8	New development shall be required to maintain natural stream courses and adjacent habitat and combine flood control, recreation, water quality, and open space functions.



Multi-Agency Post-Construction Stormwater Standards Manual

The cities of Lathrop, Lodi, Manteca, Patterson, and Tracy, as well as portions of unincorporated San Joaquin County are each classified as Phase II MS4 communities. In 2013, the SWRCB adopted a NPDES Phase II MS4 General Permit for Phase II MS4 communities to regulate stormwater and non-stormwater discharges from MS4s to waters of the U.S. As part of the Phase II General Permit, the aforementioned jurisdictions are required to develop/update post-construction standards to address stormwater quality for regulated new development and redevelopment projects (Provision E.12 of the Provisions for All Small MS4 Permittees).

The 2015 Multi-Agency Post-Construction Stormwater Standards Manual is a collaboration between the aforementioned municipalities, prepared to assist the development community in complying with the requirements of Provision E.12 of the NPDES Phase II MS4 General Permit and local ordinances. The manual is not intended to conflict with or contradict any local ordinances or standards. The manual provides guidance for planning, implementing, and maintaining effective control measures, with the intention of improving water quality and mitigating potential water quality impacts, including hydromodification, from stormwater and non-stormwater discharges. The manual provides tools to address the following objectives:

- Establish the methodology to consider the effects of stormwater runoff from a new development or redevelopment project during the project planning phase;
- Minimize contiguously connected impervious surfaces in areas of new development and redevelopment, and where feasible, to maximize on-site infiltration of stormwater runoff;
- Implement site design measures to preserve, create, or restore areas that provide important water quality benefits such as riparian corridors, wetlands, stream and buffers, and maintain, protect, and improve underlying soil quality;
- Provide source control measures to minimize the transport of and/or eliminate potential sources of pollution to stormwater runoff or run-on into the MS4 and receiving waters;
- Implement LID control measures to reduce and/or eliminate the volume of stormwater runoff and pollutants leaving the project site;
- Control post-construction peak stormwater runoff discharge volumes and velocities (hydromodification) to mitigate impacts from downstream erosion and to protect downstream habitat; and
- Develop tools for effectively operating, managing, and maintaining stormwater control measures.

City of Manteca 2013 Public Facilities Implementation Plan

The City developed the Public Facilities Implementation Plan (PFIP) as the implementing program for specific public infrastructure policies identified in the City's General Plan policy document. The purpose of the PFIP is to ensure that certain public infrastructure needed for growth – namely water, wastewater, storm drainage, and transportation facilities – are sufficient to support the City's growth in accordance with the General Plan. Another purpose of the PFIP is to ensure that infrastructure is constructed in a timely manner and financed in a way that equitably divides financial responsibility in proportion to the demands placed on new facilities.

The 2013 PFIP was revised from previous iterations to utilize a development impact fee model wherein the City assumes some responsibility for funding and constructing major facilities, while the developers, in most cases, simply pay their proportionate share to reimburse the City for the cost to finance and construct the infrastructure. The 2013 PFIP updated only water, storm drainage, and sewer collection facilities and their respective fees.



A detailed description of how the PFIP determines water fees, storm drainage fees, and sewer fees is found in the PFIP.¹⁰

City of Manteca Municipal Code

The City's Municipal Code includes regulations associated with hydrology and water quality. The applicable chapters are discussed in further detail below.

Chapter 13.28 Storm Water Management and Discharges

The Municipal Code chapter on stormwater management and discharges establishes minimum requirements and controls to protect and safeguard the general health, safety, and welfare of the public residing in watersheds within the City. The chapter seeks to meet that purpose through the following objectives:

- Minimizing increases in stormwater runoff from any development to reduce flooding, siltation, and stream bank erosion and maintain the integrity of drainage channels;
- Minimizing increases in non-point source pollution caused by stormwater runoff from development that would otherwise degrade local water quality;
- Minimizing the total annual volume of surface water runoff that flows from any specific site during and following development to not exceed the pre-development hydrologic regime to the maximum extent practicable; and
- Reducing stormwater runoff rates and volumes, soil erosion, and non-point source pollution wherever possible, through stormwater management controls and to ensure that these management controls are properly maintained and pose no threat to public safety.

To ensure construction activities are in compliance with the chapter's objectives, the City includes in Section 13.28.060 of the chapter that any person subject to a construction activity NPDES stormwater discharge permit shall comply with all provisions of such permit. Proof of compliance with said permit could be required in a form acceptable to the Public Works Director prior to or as a condition of a subdivision map, site plan, building permit, or development or improvement plan; upon inspection of a facility, during any enforcement proceeding or action, or for any other reasonable cause. As part of compliance, prior to issuance of a construction permit for the development project, a copy of the project's NOI and SWPPP must be submitted to the City.

Chapter 16.13 Final Maps

The Municipal Code chapter on final maps for subdivision projects serves to supplement the provision of the Subdivision Map Act (SMA) governing final maps. Per the Municipal Code, the form and final content of the final map must conform to the requirements established under Government Code Section 66433. In addition to the statements and acknowledgements required by the SMA, the City requires a statement for execution on final maps from various City employees, including, but not limited to, the Community Development Director, City Engineer, City Council, City Clerk, and others. As part of the requirements under the Municipal Code on final maps, the City requires approval of plans and specifications for water, stormwater drainage, and sewer improvements.

¹⁰ City of Manteca. *City of Manteca 2013 Public Facilities Implementation Plan Update*. Available at: <https://www.ci.manteca.ca.us/Engineering/Pages/PFIP.aspx#:~:text=The%20Public%20Facilities%20Implement%20Plan,City's%20General%20Plan%20Policy%20Document.&text=The%20program%20and%20fees%20for,until%20updated%20in%20the%20future>. Accessed January 2021.



City of Manteca 2013 Storm Drain Master Plan

The City's SDMP provides guidance for the planning and design of all site-specific drainage projects within the City. As part of the requirements of the agreement that authorizes the City to discharge stormwater runoff into SSJID facilities for ultimate disposal to the San Joaquin River, the City requires all new development to attenuate its runoff in a storage facility before pumping into SSJID's facilities. In addition, the City and all new development are required to comply with the State's NPDES Phase II MS4 General Permit.

City of Manteca Storm Water Management Program

The purpose of the City Manteca's SWMP (2003) is to limit to the maximum extent practicable the discharge of pollutants into the waters of the United States, as required by the USEPA, and the City's NPDES MS4 General Permit. The SWMP includes BMPs intended to reduce to the maximum extent practicable, the quantity of stormwater and the discharge of pollutants to the stormwater system. The SWMP is reviewed on an annual basis and any changes or modifications are described and submitted to Central Valley RWQCB.

4.8.4 IMPACTS AND MITIGATION MEASURES

The standards of significance and methodology used to analyze and determine the proposed project's potential impacts related to hydrology and water quality are described in this section. In addition, a discussion of the project's impacts, as well as mitigation measures where necessary, is also presented.

Standards of Significance

Consistent with Appendix G of the CEQA Guidelines, a significant impact would occur if the proposed project would:

- Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality;
- Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin;
- 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:
 - Result in substantial erosion or siltation on- or off-site;
 - Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site;
 - 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
 - Impede or redirect flood flows.
- In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation; or
- Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan.

The proposed project's impacts associated with groundwater supply are further addressed in Chapter 4.11, Public Services, Recreation, Utilities, and Service Systems, of this EIR.



Method of Analysis

The information contained in the Hydrology and Water Quality chapter of this EIR was derived primarily from the City's General Plan, General Plan EIR, and the SDMP.

The SDMP supports the essential service of storm drainage control, disposal, and regulatory compliance by assessing the condition of existing drainage facilities and by identifying additional facilities needed to accommodate runoff from future development. The SDMP includes policies for existing and future storm drainage systems; planning and design criteria used to evaluate the existing drainage facilities and to plan for future drainage facilities; an evaluation of existing and buildout conditions; and a Capital Improvement Program that provides cost estimates for various drainage capital improvements.

Determinations of significance were made based on the proposed project's modifications to existing or planned conditions, and the existing infrastructure's ability to accommodate the project.

Project-Specific Impacts and Mitigation Measures

The following discussion of impacts is based on the implementation of the proposed project analyzed against the existing environmental setting under the standards of significance identified above.

4.8-1 Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality. Based on the analysis below and with implementation of mitigation, this impact would be *less than significant*.

The proposed project includes a master planned residential community of up to 738 single-family residences and half-plex units, two neighborhood parks, an elementary/middle school, and associated infrastructure improvements located on approximately 184.7 acres of land in unincorporated San Joaquin County within the City's SOI. Development of the proposed project would result in new impervious surfaces, resulting in additional runoff generated during storm events. Additionally, the project would require grading, excavation, and other construction-related activities that could cause soil erosion at an accelerated rate during storm events. Such activities carry the potential to affect water quality and contribute to localized violations of water quality standards if stormwater runoff from construction activities enters receiving waters. The following discussion analyzes the water quality and waste discharge standards and requirements with which the proposed project would be required to comply.

Stormwater Runoff from Construction Activities

Construction activities such as grading, excavation, and trenching for site improvements would result in the disturbance of on-site soils. Exposed soils carry the potential to affect water quality through suspended soil particles and sediments transported through runoff as well as sediments transported as dust that eventually reach local water bodies. Spills or leaks from equipment and machinery, staging areas, or building sites could also potentially enter runoff. Typical pollutants from spills or leaks include, but are not limited to, petroleum and heavy metals from equipment and



machinery. Products such as paints, solvents, and cleaning agents, can also spill or leak. Such products could contain hazardous constituents. As a result, all of the aforementioned activities could result in water quality degradation if runoff containing the sediment or contaminants enters receiving waters in sufficient quantities.

Because the proposed project would require construction activities that would result in land disturbance greater than one acre, the project applicant would be required to obtain coverage under the State's NPDES Construction General Permit. Compliance with the Construction General Permit would require the project applicant to file a NOI with the SWRCB and prepare a SWPPP prior to construction. The SWPPP would incorporate BMPs in order to prevent or reduce, to the greatest extent feasible, adverse impacts to water quality from erosion and sedimentation.

Operational Impacts to Water Quality

Development of the proposed project would result in the conversion of vineyards as well as a residence and accessory structures to a residential subdivision with homes, parks, a school, and associated infrastructure like sidewalks, parking lots, and roadways. These new uses would increase the number of impervious surfaces. During the dry season, vehicles and other urban activities could release contaminants onto impervious surfaces, where they would accumulate until the first storm event. During the initial storm event, or first flush, the concentrated pollutants would be transported via runoff to stormwater drainage systems. This stormwater runoff could include contaminants such as oil and grease, nutrients, sediment, metals, pathogens, pesticides and bacteria). Additionally, the new development could convey non-stormwater runoff contaminants (e.g., car wash water, landscape irrigation water, excess fertilizers, herbicides, and insecticides) to surface waters via new storm drain facilities during storm events. This new runoff could result in an increase in the number of pollutants entering waterways, and as a result, contaminated runoff waters could ultimately flow into to the San Joaquin River and degrade the water quality of the river.

To protect against the project's operational impacts to water quality, the proposed project would implement the requirements of the City's SWMP (and the City's NPDES Phase II MS4 General Permit), which serves to limit to the maximum extent practicable the discharge of pollutants into waters of the U.S., as required by the USEPA and SWRCB. Specifically, the SWMP includes BMPs, which serve to maximize stormwater quality and measures to achieve consistency with the City's NPDES Phase II MS4 General Permit. The BMPs include a combination of source control, structural improvements, and treatment systems to the extent required in order to ensure compliance with applicable regulations.

The proposed project would also include two large detention basins that would detain stormwater accumulated on-site during major storm events. The detention basins would be designed in accordance with criteria specified by the SDMP, particularly Section 2.4, which includes, but is not limited to, the following benchmarks for permanent detention basins:

- Capacity to adequately hold 10-year, 48-hour duration storm-runoff volume from 3.56 inches of rainfall occurring over the entire contributing area;
- Inclusion of a positive shut-off control;



- Water quality treatment sufficient to meet stormwater NPDES permit requirements; and
- When practical, designed to serve multiple purposes (i.e., detention and park).

The proposed project would also include construction of storm drain lines along the site's residential streets, which would collect and convey runoff to the detention basins for temporary storage as well as water quality treatment. From the detention basins, stormwater runoff would be conveyed via a new on-site pump station to SSJID's relocated Lateral Dd, which would serve as a force main connecting to Lateral X. From Lateral X, treated stormwater from both parcels would flow to the French Camp Outlet Canal, from which flows ultimately convey to the San Joaquin River.

Pursuant to Section 16.13.040 of the City's Municipal Code, as part of filing a Final Map for the proposed project with the City, the project applicant would be required to submit improvement and drainage plans in compliance with all applicable standards, as well as receive approvals of the same from the City Engineer to proceed with the construction of the proposed project.

Conclusion

Based on the above information, the proposed project would be required to comply with all applicable federal, State, and local regulations to ensure violations of water quality standards or waste discharge requirements or substantial degradation of surface water or groundwater quality would not occur. However, without verification of compliance with Section 16.13.040 of the City's Municipal Code, which would include confirmation of adequate design of the project drainage system, a **potentially significant** impact could occur.

Mitigation Measure(s)

Implementation of the following mitigation measures would reduce the above potential impacts.

4.8-1(a) *Stormwater Pollution Prevention Plan – Project Construction*

Prior to issuance of grading permits, the project applicant shall prepare and submit to the City Public Works Department and Central Valley RWQCB a Storm Water Pollution Prevention Plan (SWPPP) detailing measures to control soil erosion and waste discharges during construction. The SWPPP shall include an erosion control and restoration plan, a water quality monitoring plan, a hazardous materials management plan, and post-construction BMPs. The BMPs shall be maintained until all areas disturbed during construction have been adequately stabilized.

Prior to commencement of construction activities (as they are phased), including grading, the project applicant shall submit a Notice of Intent (NOI) to the SWRCB for coverage under the General Construction Permit. Specific BMPs shall be determined during the final states of project design. However, the SWPPP shall include specific practices to minimize the potential that pollutants will leave the site during



construction. Such practices include, but are not limited to, establishing designated equipment staging and washing areas, protecting spoils and soil stockpile areas, and identifying equipment exclusion zones.

4.8-1(b) *Water Quality BMPs – Project Operation*

Prior to the City's approval of final improvement plans, the applicant shall submit a master drainage plan, subject to the review and approval by the City Engineer. This plan shall address the following requirements:

- *Calculations of pre-development runoff conditions and post-development runoff scenarios, using appropriate engineering methods, to evaluate potential changes to runoff through specific design criteria and account for increased surface runoff;*
- *Assessment of existing drainage facilities within the project area and an inventory of necessary upgrades, replacements, redesigns, and rehabilitation;*
- *List all BMPs for water quality protection, source control, and treatment control, which shall be developed in accordance with the Multi-Agency Post-Construction Stormwater Standards Manual;*
- *A proposed maintenance program for the on-site drainage system; and*
- *Phasing standards for drainage systems to be installed on a project- and parcel-specific basis.*

Drainage systems, including any detention basin(s), shall be designed in accordance with the City's and other applicable flood control design criteria. As a performance standard, measures to be implemented from the master drainage plan shall provide for no net increase in peak stormwater discharge relative to current conditions, ensure that 10-year flooding events and their potential impacts are maintained at or below current levels, and ensure that people and structures are not exposed to additional flood risk.

Prior to issuing a grading permit for any/each phase of the project, the City shall require the project applicant to demonstrate that the portion of the project subject to the grading permit is consistent with the recommendations and conclusions of the master drainage plan and shall implement the measures identified in the plan. If the plan does not adequately address the drainage impacts of the specific development, the City shall require the applicant to prepare additional analysis and incorporate measures consistent with the scope and performance standards associated with the plan to ensure that drainage and flooding impacts are avoided.



Level of Significance Following Mitigation

Implementation of Mitigation Measures 4.8-1(a) and (b) would ensure design of the project drainage system would comply with all applicable federal, State, and local regulations and prevent any violations of water quality standards or waste discharge requirements or substantial degradation of surface water or groundwater quality. Thus, implementation of the above mitigation measures would reduce the project's potential impact on water quality standards and requirements to a *less-than-significant* level.

4.8-2 Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin. Based on the analysis below, the impact is considered *less than significant*.

The following discussions analyze the proposed project's potential impact to groundwater supplies and groundwater recharge.

Groundwater Supplies

For a discussion relating to the potential effects of the proposed project on groundwater as used for the project's water supply, see Impact 4.11-6 in Chapter 4.11, Public Services, Recreation, Utilities, and Service Systems, of this EIR.

As noted above, the City's wells are located in the ESJCGS. According to DWR Bulletin 118, the ESJCGS is in a critical condition of overdraft. Groundwater levels have been historically declining at an average rate of 1.7 feet per year. Groundwater overdraft in the overall basin and the City's groundwater withdrawal rate is of vital concern to the City, as this poses a long-term risk to the reliability of the groundwater supply. However, as discussed in Chapter 4.11, the proposed project is anticipated to use treated surface water from SSJID's South County Water Supply Program (SCWSP) for a portion of the project's water supply, and would, therefore, not rely solely on local groundwater sources for water supplies.

Taking into account the combined sources of groundwater and surface water available to the City, Impact 4.11-6 concludes the City would have sufficient water supplies available to serve the proposed project and reasonably foreseeable future development during normal, dry, and multiple dry years, and a less-than-significant impact would occur. As such, the proposed project would not substantially decrease groundwater supplies.

Groundwater Recharge

Groundwater recharge occurs by percolation of rainwater through permeable surfaces. When development occurs, groundwater recharge can be reduced. The majority of the project site is currently composed of vineyards, though the large residence, accessory buildings and roads currently provide impervious areas. Development of the proposed project would result in approximately 43 percent more impervious surfaces than currently exist in the West Parcel and 41 percent more impervious surfaces than currently exist in the East Parcel; however, the project would also include 16.2 acres of parks (i.e., permeable ground), as well as landscaping areas throughout where



some recharge could occur. Nevertheless, the proposed project would result in an incremental reduction in the amount of natural soil surfaces available for potential infiltration of rainfall and runoff to the underlying aquifers.

As discussed above, due to the lack of streams or alluvial fan conditions in the City, notable groundwater recharge areas are not identified. Instead, groundwater recharge in Manteca occurs mainly from the San Joaquin River, as well as from irrigation of agricultural lands surrounding the City and infiltration from streams flowing west out of the Sierra Nevada. Furthermore, while the project site is comprised of Dehli fine sand, Dehli loamy sand, and Tinnin loamy coarse sand soils, which are highly permeable, the project site is only a small percentage of the total 38 square miles of the ESJCGS utilized by the City. Notably, the majority of runoff from the developed project site would drain through project infrastructure improvements to the local storm drainage system and eventually to the San Joaquin River, where the majority of recharge to the subbasin occurs. Therefore, development of the proposed project would not substantially interfere with groundwater recharge.

Conclusion

Based on the above information, the proposed project would not substantially interfere with groundwater recharge such that the project may impede sustainable groundwater management of the basin and impacts would be ***less than significant***.

Mitigation Measure(s)

None required.

4.8-3 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 result in substantial erosion or siltation on- or off-site or 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. Based on the analysis below and with implementation of mitigation, the impact is considered *less than significant***.**

The project site does not contain any streams or other water features of any type. While the project site's current setting includes relatively little impervious surfaces and is dominated by vineyards, urbanization of the project site would result in a mix of residential structures, a school site, parks, residential streets, and infrastructure improvements. Consequently, the project site's pervious surfaces would be altered through the addition of residential and public development. The project would consist of approximately 94 acres of single-family detached units, approximately 9.6 acres of half-plex units, and approximately 16.1 acres for the school site. As many as 738 residential units would be developed, which would include impervious rooftops and driveways. The school site would include similar types of impervious surfaces. Additionally, the proposed project would include approximately 48.8 acres dedicated to the development of streets and infrastructure, which would create even more



impervious surfaces. In total, the proposed project would result in approximately 43 percent more impervious surfaces than currently exist in the West Parcel and 41 percent more impervious surfaces than currently exist in the East Parcel.

The proposed project would be developed in accordance with the City's SDMP and SWMP. As detailed above, the project site is located within the City's South Drain storm drain subshed area, specifically Drainage Zone 36 (see Figure 4.8-2). Following development of the proposed project, stormwater runoff from both the East Parcel and the West Parcel would first be diverted to each parcel's detention basin, which would then meter flows to the parcel's adjacent water quality basin. Within the East Parcel, 1.8-acre water quality basin would be located to the east of Pillsbury Road, within the park area adjacent to the elementary/middle school. Stormwater from the East Parcel residences would flow through new drain inlets and connections to underground storm drain pipes to the basin for treatment. After treatment, a new pump station would pump flows to a main located in Pillsbury Road, which extends to SSJID Lateral X. Similarly, runoff from the residences west of Pillsbury Road would flow to the detention basin located within the West Neighborhood Park. The detention basin would meter flows to an adjacent water quality basin, approximately 1.4 acres in size with a ponding depth of 1.5 feet, a media depth of 1.5 feet, and one foot of gravel. Following treatment, flows would be pumped by way of a new pump station to the storm drain main located in Pillsbury Road, which extends to SSJID Lateral X. From SSJID Lateral X, treated stormwater from both parcels would flow to the French Camp Outlet Canal, from which flows ultimately convey to the San Joaquin River. Thus, following development of the proposed project, the existing drainage pattern of the site would not be altered such that the project would result in substantial erosion or siltation on- or off-site or 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. However, without compliance with the NPDES Construction General Permit and preparation of a SWPPP, which incorporates industry standard BMPs to protect against polluted runoff during project construction, the proposed project could result in substantial erosion or siltation on- or off-site or 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.

Based on the above information, without compliance with the NPDES Construction General Permit during project construction, the proposed project could substantially alter the existing drainage pattern of the site or area in a manner which would result in substantial erosion or siltation on- or off-site or 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. Therefore, the project could result in a ***potentially significant*** the impact.

Mitigation Measure(s)

Implementation of the following mitigation measures would reduce the above potential impacts.

4.8-3 *Implement Mitigation Measures 4.8-1(a) and 4.8-1(b).*



Level of Significance Following Mitigation

Implementation of Mitigation Measures 4.8-3 would ensure the proposed project complies with the NPDES Construction General Permit and prepares a SWPPP, incorporating industry standard BMPs during project construction to protect against substantial erosion and/or siltation and polluted runoff. In addition, Mitigation Measure 4.8-3 would ensure that a master drainage plan is submitted to the City Engineer for review and approval and that measures are implemented from the master drainage plan to ensure a net increase in peak stormwater discharge relative to current conditions does not occur, that 100-year flooding and its potential impacts are maintained at or below current levels, and that people and structures are not exposed to additional flood risk. Thus, implementation of the above mitigation measure would reduce the proposed project's potential to substantially alter the existing drainage pattern of the site in a manner which would result in potential impacts related to polluted runoff and all potential impacts would be reduced to a *less-than-significant* level.

4.8-4 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 substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site or impede or redirect flood flows. Based on the analysis below, the impact is considered *less than significant*.

As detailed in Impact 4.8-3, above, following development of the project site, the proposed project would result in approximately 43 percent more impervious surfaces than currently exist in the West Parcel and 41 percent more impervious surfaces than currently exist in the East Parcel, which could potentially increase the rate and volume of runoff from the site during storm events. However, as part of development of the proposed parkland sites within the East Parcel and West Parcel, the project would include detention basins, which would temporarily detain captured runoff, before releasing flows to adjacent water quality basins for water quality treatment. The detention basins would be designed to temporarily store stormwater runoff to reduce the peak rate of runoff to the storm drainage system during rain or flood events. As such, through the temporary detainment of on-site runoff, the proposed detention basins would ensure that the potential for downstream flooding following development of the proposed project is reduced.

Furthermore, as discussed above, the project site is not currently within a SFHA. Pursuant to FEMA designations, a SFHA is an area that has special flood, mudflow, or flood-related erosion hazards and is subject to FEMA National Flood Insurance Program's floodplain management regulations. The primary flood hazard in the City's vicinity is the San Joaquin River, located approximately six miles west of the project site, as well as the river's tributaries, including Walthall Slough along the southwestern border of the City's planning area. A levee under the jurisdiction of Reclamation District 17 and located between Williamson Road to Airport Way provides flood protection for the land north and east of Walthall Slough, including the project site approximately



three miles northeast of the levee. Areas subject to inundation in the event of dam failure would generally coincide with the 100-year floodplain area. However, as shown in Figure 4.8-4 the project site is located within an Area of Minimal Flood Hazard (Zone X), which is an area outside of SFHAs and elevated above the 500-year floodplain. As such, the proposed project would not be subject to flooding impacts associated with levee failure. Additionally, development of the proposed project would not alter the existing off-site drainage pattern, and the project would connect to the existing storm drainage infrastructure to the north and west of the project site. Therefore, development of the proposed project would not result in an increase in the rate or volume of runoff than currently exists on-site.

Based on the above information, although the proposed project would alter the site with new impervious surfaces, the project would not substantially alter the existing drainage pattern of the site or area in a manner which would substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site or impede or redirect flood flows. Therefore, the impact would be ***less than significant***.

Mitigation Measure(s)

None required.

4.8-5 In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation. Based on the analysis below, the impact is considered *less than significant*.

As discussed previously and shown in Figure 4.8-4, the project site is within Flood Hazard Zone X, described by FEMA as an area of minimal flood hazard, usually above the 500-year floodplain. Additionally, the project site is not located near the coast or any large body of water. Further, it is not located within a dam inundation area. Finally, the project site is not located on or anywhere near a mountainous or hilly area. Thus, development of the proposed project would not place housing or structures within a 100-year floodplain or expose people or structures to a risk of loss, injury, or death involving flooding, including flooding as a result of a failure of a levee or dam or inundation by seiche, tsunami, or mudflow. Accordingly, restrictions on development or special requirements associated with flooding are not required for the project. Therefore, the proposed project would result in a ***less-than-significant*** impact related to flood hazard, tsunami, or seiche zones.

Mitigation Measure(s)

None required.

4.8-6 Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan. Based on the analysis below, the impact is considered *less than significant*.

As detailed throughout this EIR chapter, as part of obtaining authorizations to proceed with implementation of the proposed project, the project would be required to comply



with various regulations at the federal, State, and local level that exist to protect against environmental impacts to water quality and groundwater sustainability. Regulations with which the project would be required to adhere would include requirements established by the City's NPDES Phase II MS4 Stormwater Permit, the SWRCB's NPDES Construction General Permit, and design criteria established in the City's SDMP and the City's Municipal Code. Compliance with the aforementioned regulations would ensure the project would not conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan.

In addition, as discussed above, the City of Manteca is a member agency of the Groundwater Authority, which adopted a GSP in 2019. The GSP outlines the need to reduce overdraft conditions and has identified 23 projects for potential development that either replace groundwater use (offset) or supplement groundwater supplies (recharge) to meet current and future water demands. The water supply projects either replace groundwater use or supplement groundwater supplies to attain the current estimated pumping offset and/or recharge needs identified in the GSP. Within the City of Manteca, the GSP identifies "City of Manteca Advanced Metering Infrastructure" and "Recycled Water Transfer to Agriculture" projects. The proposed project would conflict with neither of the GSP's projects identified for the City. Additionally, as discussed under Impact 4.8-2, the proposed project is anticipated to use treated surface water from SSJID's SCWSP for a portion of the project's water supply, and would, therefore, not rely solely on local groundwater sources for water supplies, consistent with the goals of the GSP. Therefore, the proposed project would not conflict or obstruct implementation of an adopted sustainable groundwater management plan.

Taking into account the combined sources of groundwater and surface water available to the City, Impact 4.11-6 concludes the City would have sufficient water supplies available to serve the proposed project and reasonably foreseeable future development during normal, dry, and multiple dry years, and a less-than-significant impact would occur. As such, the proposed project would not substantially decrease groundwater supplies. Therefore, the project would result in a ***less-than-significant*** impact.

Mitigation Measure(s)

None required.

Cumulative Impacts and Mitigation Measures

As defined in Section 15355 of the CEQA Guidelines, "cumulative impacts" refers to two or more individual effects which, when considered together, are considerable, compound, or increase other environmental impacts. The individual effects may be changes resulting from a single project or a number of separate projects. The cumulative impact from several projects is the change in the environment that results from the incremental impact of the project when added to other closely related past, present, and reasonably foreseeable probable future projects.

The cumulative setting for impacts related to hydrology and water quality is the City's South Drain storm drain subshed area, which is shown on Figure 4.8-2.



4.8-7 Cumulative impacts related to the violation of water quality standards or waste discharge requirements, groundwater quality, management, and recharge, and impacts resulting from the alteration of existing drainage patterns. Based on the analysis below, the cumulative impact is less than significant.

Impacts related to stormwater quality, groundwater, and drainage patterns are discussed separately below.

Stormwater Quality

Construction activities have the potential to affect water quality and contribute to localized violations of water quality standards if stormwater runoff from construction activities enters receiving waters. Runoff from additional construction sites within the project area could also carry sediment from erosion of graded or excavated surface materials, leaks or spills from equipment, or inadvertent releases of building products, which could result in water quality degradation if runoff containing such sediment or contaminants should enter receiving waters in sufficient quantities. Thus, construction activities associated with the proposed project, in combination with construction activities associated with other reasonably foreseeable projects in the City's South Drain storm drain subshed area, could result in potentially significant cumulative impacts related to water quality. However, all construction projects resulting in disturbance of more than one acre of land are required to comply with the most current provisions of the NPDES Construction General Permit requirements. Conformance with the Construction General Permit would require preparation of SWPPPs for all such projects and subsequent implementation of BMPs to prevent the discharge of pollutants. Considering the existing permitting requirements for construction activity in the project area, cumulative construction within the South Drain storm drain subshed area would be heavily regulated and impacts related to the degradation of water quality would be less than cumulatively significant.

Similar to the proposed project, cumulative development within the South Drain storm drain subshed area would also be subject to NPDES Phase II Small MS4 General Permit requirements, including source control and treatment control features. Specifically, regulated projects are required to divide the project area into Drainage Management Areas or DMAs and implement and direct water to appropriately sized SDMs and Baseline Hydromodification Measures within each DMA. Source control measures must be designed for pollutant-generating activities or sources consistent with recommendations from the California Stormwater Quality Association (CASQA) *Stormwater BMP Handbook for New Development and Redevelopment*, or equivalent manual, and must be shown on improvement plans (prior to building permits ever getting issued).

Based on the conceptual stormwater design, during operations, stormwater runoff from developed sites within the South Drain storm drain subshed area would be properly treated prior to discharge, thus preventing urban pollutants from entering and potentially polluting the local drainage system. Prior to approval of projects within the subshed area, a final drainage report would be required with submittal of the



improvement plans for City review and approval to substantiate preliminary LID sizing calculations. In addition, pursuant to Phase II Small MS4 General Permit requirements, a Post-Construction Stormwater Control Plan would be required for the proposed project. The project would be subject to Construction General Permit requirements, including implementation of BMPs and preparation of a site-specific SWPPP like all other developments within the drainage shed. Compliance with the foregoing regulations would ensure that impacts related to the alteration of drainage patterns, the discharge of pollutants, and flooding would be less than cumulatively significant.

Groundwater Recharge

Cumulative development within the project region would result in increased amounts of impervious surfaces, which would reduce the infiltration of groundwater within the project region. Pursuant to the GSP, 310,098 acres out of 610,890 acres (51 percent) of agricultural and grazing land within the ESJCGS are categorized as moderately good, good, or excellent for groundwater recharge.¹¹ The South Drain storm drain subshed area, which is located within the ESJCGS recharge area, is anticipated to serve 8,680 acres of the growing south area of the City, including new industrial land in the southeast. As such, upon buildout of the South Drain storm drain subshed area, the number of impervious surfaces within the area, relative to existing conditions, would increase. Nevertheless, while cumulative development would increase the number of impervious surfaces in the project region, new stormwater drainage infrastructure would be required to be implemented as part of new development, which would ensure that runoff continues to be discharged to the French Camp Outlet Canal, from which flows ultimately convey to the San Joaquin River, where the majority of recharge to the subbasin occurs. Furthermore, the project site itself is not considered a site of substantial groundwater recharge; thus, development of the project would not result in a significant cumulative loss of groundwater recharge.

Drainage Patterns

Concurrent implementation of the proposed project and cumulative development within the South Drain storm drain subshed area would result in changes to the drainage pattern of the project area. Changes in drainage patterns would primarily be attributed to the development of currently undeveloped areas within the drainage shed, which would result in the conversion of pervious surfaces to impervious surfaces. However, similar to the proposed project, future development projects would be required to adhere to City regulations in establishing connection to the City's storm drainage system. Compliance with regulations would ensure cumulative development would not substantially alter existing drainage patterns so as to result in substantial erosion or siltation on- or off-site or 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. In addition, through compliance with existing local standards and NPDES Phase II Small MS4 General Permit requirements, cumulative development would incorporate applicable storm drainage features, such as detention basins to temporarily detain flows during storm events, which would ensure cumulative development does not result in an increase in the rate and volume of runoff, relative to existing conditions. Overall, compliance would ensure

¹¹ Eastern San Joaquin Groundwater Authority. *Eastern San Joaquin Groundwater Subbasin Groundwater Sustainability Plan*. [pg. 2-23]. November 2019.



cumulative development would not result in alterations to drainage pattern to the extent that such alteration would result in flooding on- or off-site or impede or redirect flood flows.

Conclusion

Given the analysis presented in this chapter, and the highly regulated nature of cumulative development in the project region, the proposed project's cumulative impact related to the violation of water quality standards or waste discharge requirements, groundwater quality, management, and recharge, and impacts resulting from the alteration of existing drainage patterns would be ***less than cumulatively significant***.

Mitigation Measure(s)

None required.



4.9 LAND USE AND PLANNING/POPULATION AND HOUSING

4.9 LAND USE AND PLANNING/POPULATION AND HOUSING

4.9.1 INTRODUCTION

The purpose of this Land Use and Planning/Population and Housing chapter of this EIR is to examine the proposed project's compatibility with existing and planned land uses in the area and to identify any incompatibilities with applicable land use plans, policies, and regulations adopted by the City for the purpose of avoiding environmental effects, including the Manteca General Plan,¹ the Manteca General Plan EIR,² the City of Manteca Housing Element,³ the City of Manteca Zoning Ordinance, and the San Joaquin Local Agency Formation Commission (LAFCo) Change of Organization Policies and Procedures.⁴ Furthermore, this chapter includes discussion of the potential for the proposed project to induce substantial population growth in the project area, either directly or indirectly. The reader is referred to the various environmental resource evaluations presented in the other technical chapters of this EIR for a discussion of potential physical/environmental effects that may result from the proposed land use changes.

Comments received during the Notice of Preparation (NOP) comment period pertained to concerns relating to interfaces and buffers between existing residential uses and the proposed project, population growth leading to overcrowding, the role of the San Joaquin County Resource Conservation District in reviewing the project, consistency with San Joaquin LAFCo annexation policies and procedures, inclusionary housing, as well as overall land use compatibility.

4.9.2 EXISTING ENVIRONMENTAL SETTING

This section describes the existing physical land uses on the project site, as well as the site's land use and zoning designations. In addition, the City of Manteca's current population and housing statistics are discussed. The proposed project site is located in a currently unincorporated area of San Joaquin County, southeast of the City of Manteca limits, south of State Route (SR) 120 and west of SR 99 (see Figure 3-1, Regional Location Map, in Chapter 3 of this Draft EIR). The City limits currently make up the project's western, northern, and eastern boundaries. The project site is within the City's Sphere of Influence (SOI), and is identified by San Joaquin County Assessor's Parcel Numbers (APNs) 226-120-10, -11, and 226-140-04.

Existing Land Uses

The project site consists of approximately 184.7 acres. Currently, the site is planted with 141.6 acres of vineyards, which are harvested annually. The project site also contains a large barn, an office structure, and a tree-lined driveway leading up to a 20,000-square-foot (sf) residence.

Land surrounding the project site to the north, west, and east is designated Low-Density Residential (LDR) by the existing City of Manteca General Plan. The San Joaquin County General Plan designates the unincorporated land to the south of the site as General Agriculture (A/G). Low-density residential development associated with the Pillsbury Estates, Woodward Park, and

¹ City of Manteca. *Manteca General Plan 2023 Policy Document*. October 6, 2003.

² City of Manteca. *Manteca General Plan 2023 Environmental Impact Report*. Certified October 6, 2003.

³ City of Manteca. *City of Manteca 2015-2023 Housing Element*. Adopted January 19, 2016.

⁴ San Joaquin County Local Agency Formation Commission. *Policies and Procedures*.



Evans Estates communities is located to the north and the west, while the lands directly south and east of the project site are planted with orchards (see Figure 3-2 of Chapter 3 of this EIR, Project Description). However, as mentioned above, the southern and eastern lands planted with orchards are designated LDR and UR-LDR, respectively, per the City's General Plan. As part of development of the proposed project, the future Antone Raymus Parkway would be constructed along the southern boundary of the site to connect to Manteca Road. Antone Raymus Parkway would feature an east-to-west layout from Manteca Road to the Atherton Drive extension and would be constructed over two phases, interim condition and ultimate condition.

The proposed project would be responsible for development of only the road's interim condition. Under the interim condition, the project applicant would be required to dedicate ROW to accommodate a 65.5-foot half-width street section. The project would construct a new street structural section, curb, gutter, an eight-foot-wide meandering sidewalk parallel to the north of the road, landscaping with trees and an automatic irrigation system, street lights, signage, and striping. The improvements would be constructed from Main Street to the Atherton Drive extension. The Antone Raymus Parkway/Pillsbury Road intersection would be stop-controlled.

In addition, two lanes of Atherton Drive would be constructed along the eastern boundary of the site. Pillsbury Road would be extended through the project site from the north to connect the proposed project and the existing northern residential communities to Antone Raymus Parkway. Areas further south of the project would remain within the County and consist of agricultural uses.

General Plan Land Use Designations

The project site's land use designations according to the County and City General Plans are discussed in further detail below.

San Joaquin County General Plan

The project site is currently located within San Joaquin County and has a San Joaquin County General Plan land use designation of Agriculture/Urban Reserve (A/UR). The definition for the A/UR designation is as follows:

This designation generally applies to areas currently undeveloped or used for agricultural production that are in the logical path of development around an Urban Community or City Fringe Area. This designation may be applied to areas adjacent to cities and in City Fringe Areas if 1) the area identified is designated for urban development in a city general plan, and 2) the County determines that the area represents a reasonable expansion of a city.

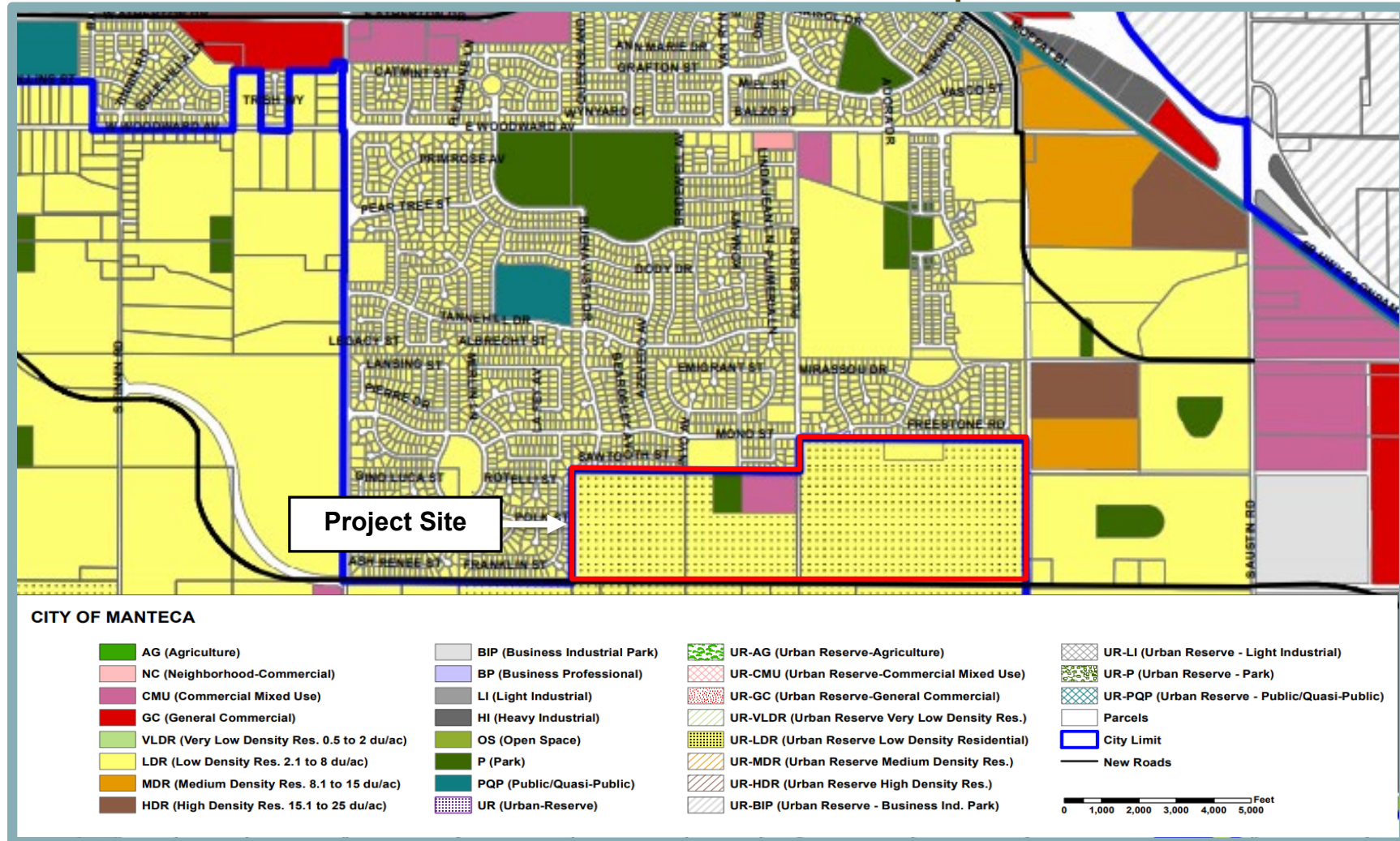
Typical uses within the A/UR designation include crop production, agricultural support and sales, single-family detached dwellings, and natural open space areas. The density is a maximum of 0.05 dwelling units per acre (du/ac).

Manteca General Plan

The Manteca General Plan provides land use designations for all land uses within the City of Manteca, as well as those within the City's SOI. The proposed project site is currently designated as Urban Reserve – Low Density Residential (UR-LDR), Park (P), and Commercial Mixed Use (CMU) under the 2023 Manteca General Plan (see Figure 4.9-1). These land use designations are defined in the Manteca General Plan as follows:



**Figure 4.9-1
 Manteca General Plan Land Use Map**



Urban Reserve – Low Density Residential (UR-LDR)

Urban Reserve is applied to many properties around the perimeter of the City. In most instances the Urban Reserve category overlies another land use category. In these instances, the underlying land use is the intended use when the land is ultimately annexed to the City. Urban Reserve with no underlying land use indicates that the City intends to expand in the time horizon beyond the current General Plan and that it is premature to indicate a specific future land use in this area. Urban Reserve is shown on the General Plan land use map to the north and east of the proposed growth areas.

The LDR land use establishes a mix of dwelling unit types and character determined by the individual site and market conditions. The density range allows substantial flexibility in selecting dwelling unit types and parcel configurations to suit particular site conditions and housing needs. The type of dwelling units anticipated in this density range include small lots and clustered lots as well as conventional large lot detached residences.

Park (P)

This designation provides for neighborhood, community and regional parks, golf courses, and other outdoor recreational facilities within urban development. Specific uses include public recreation sites, including baseball fields, tot lots and play apparatus, softball and soccer playing fields, swimming pools, community center buildings, meeting facilities, libraries, art centers, after school care facilities, art in public places, facilities for night-time recreation, trails benches, interpretive markers, picnic areas, barbecue facilities, landscaping, irrigation, city wells, trees and natural habitat areas.

Commercial Mixed Use (CMU)

The CMU designation accommodates a variety of purposes including high density residential, employment centers, retail commercial, and professional offices. The mixed-use concept would integrate a mix of compatible uses on a single site that includes sales, services and activities which residents may need on a daily basis. With pedestrian access, these sites will enable residents to walk or bike for many local trips, instead of driving for convenience trips.

The sites may be integrated vertically with mixed uses above one another, such as residential or office uses over a commercial use. Sites may also be mixed horizontally with the uses side-by-side, but linked together through common walkways, plazas and parking areas. In-fill sites in the existing urban area, particularly along the Main Street, Airport Way and Yosemite Avenue corridors may be developed entirely as multi-family residential projects. Sites developed primarily as residential may also include office and retail components. The CMU designation may also be applied to smaller parcels within neighborhoods, which could accommodate a variety of uses, but on a smaller, less intense scale that is compatible with the adjacent residential uses.

The residential component of any CMU development shall provide dwellings at densities of 15.1 to 25 units per acre. The residential component shall be considered to be that portion of a site or plan area allocated exclusively to residential use, net of any commercial or office use.

Because the project site is currently designated as UR-LDR, P, and CMU by the City of Manteca General Plan, a General Plan Amendment (GPA) would be required to remove the CMU (approximately 7.6 acres) designation, change the UR-LDR designation to LDR, increase and relocate the Park designation by 8.1 acres (to 16.2 acres), and add a Public/Quasi Public



designation (16.1 acres) (see Figure 3-3, General Plan Amendment in Chapter 3 of this Draft EIR).

Zoning Designations

The site is currently located within San Joaquin County and only has a County zoning designation. The project applicant is requesting Prezoning to allow for annexation. The site is proposed to be prezoned to Planned Development Low Density Residential (PD-R-1), Public/Quasi-Public (PQP), and Planned Development Park (PD-P). In addition, the proposed project requires the approval of a Planned Development entitlement from the City of Manteca.

San Joaquin County Zoning

The project site is zoned General Agriculture (AG-40), which is defined as follows:

This zone is established to preserve agricultural lands for the continuation of commercial agriculture enterprises. Minimum parcel sizes within the AG Zone are 20, 40, 80 or 160 acres, as specified by the precise zoning.

Manteca Zoning

Consistent with the Cortese-Knox-Hertzberg Local Government Reorganization Act, Prezoning is required for proposed annexation areas (see Government Code Section 56375). To ensure compatibility with the Manteca General Plan LDR designation for the project site, the 184.7-acre site would be prezoned to the City's PD-R-1, PQP, and PD-P zoning districts. The three districts are defined in the Manteca Zoning Ordinance as follows:

Planned Development (PD)

The purpose of the Planned Development overlay is intended to demonstrate that the development plan with any proposed deviations is consistent with the General Plan and would result in a quality project that is compatible with surroundings, preserves site resources, minimizes hazards, and provides a public benefit (see Manteca Municipal Code Section 17.10.140). According to Section 17.30.030 of the City's Municipal Code, allowed uses within a Planned Development zoning district are those uses listed in the adopted Planned Development document. Where a Planned Development does not provide a listing of allowed uses, the regulations of the base zoning district, R-1, shall prevail.

Planned Development Low Density Residential (PD-R-1)

The purpose of the PD-R-1 district is to provide a traditional single-family neighborhood structure for the project site, yet allow for substantial flexibility in selecting dwelling unit types and parcel configurations to suit site conditions and housing needs. The types of dwelling units include small lots and clustered lots as well as conventional large-lot detached residences.

Public/Quasi-Public (PQP)

The PQP district provides for government-owned facilities, public and private schools, institutions, civic uses and public utilities, and quasi-public uses such as hospitals and religious institutions. The purpose of the PQP zoning district is to allow for the proposed Ripon Unified School facility on the western portion of the project site.

Planned Development Park (PD-P)

The purpose of the P district is to provide for neighborhood, community, and regional parks, golf courses, and other outdoor recreational facilities within urban development.



Adjacent Land Use Designations

San Joaquin County and the City of Manteca have adopted the following land use designations for the areas surrounding the project site. The City's land use designations for the surrounding areas can be seen in Figure 4.9-1.

- North: City: LDR, P, and High Density Residential (HDR);
- South: County: A/G; City: UR-LDR;
- East: City: P, LDR, Medium Density Residential (MDR); and
- West: City: P, LDR.

Upon annexation of the project site to the City, the area to the south would be the only adjacent land located within the County with the land use designation of A/G, which is defined in the San Joaquin County General Plan as follows:

This designation provides for large-scale agricultural production and associated processing, sales, and support uses. The General Agriculture Designation generally applies to areas outside areas planned for urban development where soils are capable of producing a wide variety of crops and/or support grazing. Typical building types include low-intensity structures associated with farming and agricultural processing and sales.

The Manteca General Plan's definition for the UR-LDR, P, and CMU, designations are presented above. The Manteca 2023 General Plan defines the remaining adjacent land use designations as follows:

Medium Density Residential (MDR)

The MDR use (8.1 to 15 dwelling units per gross acre) includes single family homes, smaller scale multi-family developments, including garden apartments, townhouses, and cluster housing. The density range will accommodate small-lot single family homes that will typically be smaller in size and more affordable to residents.

High Density Residential (HDR)

The HDR use (15.1 to 25 dwelling units per acre) includes multi-family apartment style housing. The multi-family dwelling sites are typically located with direct access to arterial streets. The sites have access to the pedestrian and bikeway network along the street corridor and are located along the conceptual route of a public transportation shuttle route. Most sites are near a neighborhood park and a neighborhood commercial center or larger commercial facility.

Adjacent Zoning Designations

San Joaquin County and the City of Manteca have adopted the following zoning designations for the areas surrounding the project site.

- North: City: R-1;
- South: County: AG-40;
- East: City: Master Plan (MP) (designated for Austin Road Master Plan); and
- West: City: R-1.

The area to the south of the project site is within San Joaquin County and has a zoning designation of AG-40, which has been defined above.



As noted, the current City zoning designations surrounding the project site include R-1 and MP. The R-1 definition is provided above and the City's Zoning Ordinance defines the MP zoning designations as follows:

The MP designation provides a process for the consideration and regulation of areas suitable for proposed comprehensive development with detailed development plans and those areas that require special planning to provide appropriate planned development.

Population and Housing

The City of Manteca's historical, current, and projected population and housing, as well as a discussion on employment and the jobs-to-housing ratio are provided below.

Historical and Current Population

Between 2001 and 2010, Manteca's population grew from 49,255 to 67,410 residents. Between 2010 and 2020, Manteca's population further grew approximately 20.1 percent, resulting in a total population of 80,932.⁵

Growth Rates

The 2016 Housing Element of the City of Manteca General Plan provides population and employment projections based on the San Joaquin Council of Government's (SJCOG's) most recent projections. As shown in Table 4.9-1, Manteca's population is projected to increase from 87,471 people in 2020 to 97,410 people by 2025 and 107,766 people in 2030. By 2035, the City's population is projected to be 117,010 people. The number of jobs is projected to increase from 17,805 jobs in 2020 to 19,043 in 2025 and 20,401 in 2030.

Table 4.9-1 Population and Housing Projections		
Year	Population	Employment
2020	87,471	17,805
2025	97,410	19,043
2030	107,766	20,401
2035	117,010	21,756
<i>Source: City of Manteca Housing Element, 2016.</i>		

With population projected to grow faster than employment, the Manteca jobs-to-household ratio would likely decrease, furthering the City's role as a bedroom community. However, according to the Manteca General Plan EIR, full buildout of the Manteca General Plan has been designed to sustain a jobs-to-housing ratio that would be balanced.

Single-family detached housing units account for the overwhelming majority of housing in Manteca. At approximately 79 percent of the total housing stock in 2020, single-family detached units in Manteca made up a much larger share of the total than in the State overall, where only 57.4 percent of all units were single-family detached.⁶ From 2018 to 2020, 1,605 single-family

⁵ City of Manteca. *City of Manteca 2015-2023 Housing Element*. Adopted January 19, 2016.

⁶ State of California Department of Finance. *E-5 Population and Housing Estimates for Cities, Counties, and the State, 2011-2020, with 2010 Census Benchmark*. May 2020.



detached units were built in Manteca, making up 88.8 percent of all new units constructed.⁷ Multi-family housing with five or more units made up the next largest segment of Manteca's housing stock at four percent of the total in 2020; between 2018 and 2020, only 196 units were built in multi-family complexes with five or more units.

Projected Housing Needs

The Regional Housing Needs Plan (RHNP) is a minimum projection of additional housing units needed to accommodate projected household growth of all income levels by the end of the housing element's statutory planning period. Each locality's Regional Housing Needs Allocation (RHNA) is distributed among four income categories to address the required provision for planning for all income levels.

The SJCOG adopted its current RHNA Methodology on June 23, 2022. Pursuant to the adopted RHNA Methodology, the total RHNA allocation for the City of Manteca would be 8,306 new housing units for the June 30, 2023 to December 31, 2031 planning period.⁸ Of the total, 5,120 units would be affordable to moderate-income households or those earning below the moderate-income level, including 1,465 moderate-income units, 1,507 low-income units, and 2,148 very low-income units.

Jobs-to-Housing Ratio

The City of Manteca is a "housing-rich" community, indicating more housing opportunities than jobs available. Many residents have moved to Manteca, searching for a lower-cost housing alternative to the Bay Area. Many of these residents have maintained their jobs in the Bay Area, choosing to commute from Manteca. The commute pattern directly affects Manteca's economy.

Pursuant to Government Code Section 65584(d), the RHNA is required to meet five statutory objectives that relate to (1) increasing the housing supply and mix of housing types; (2) promoting infill, equity, and the environment; (3) ensuring a job-housing balance and fit; (4) promoting regional income parity; and (5) affirmatively furthering fair housing. With respect to job-housing balance and fit, as part of SJCOG's adopted RHNA Methodology, an improved intraregional relationship between jobs and housing should be promoted, including an improved balance between the number of low-wage jobs and the number of housing units affordable to low-wage workers in each SJCOG jurisdiction. In accordance with the adopted RHNA Methodology, the jobs-housing fit ratio for Manteca would be 3.7, based on a low-wage job total of 11,521 and an affordable housing unit total of 3,135.⁹

4.9.3 REGULATORY SETTING

The following is a description of environmental laws and policies that are relevant to the CEQA review process concerning land use and planning, as well as population and housing matters.

⁷ State of the Cities Data Systems. *Building Permits Database*. Available at: <https://socds.huduser.gov/permits/>. Accessed January 2021.

⁸ San Joaquin Council of Governments. *Regional Housing Needs Plan: 6th Cycle Regional Housing Needs Allocation 2023-2031*. [pg. 9]. June 23, 2022.

⁹ San Joaquin Council of Governments. *Regional Housing Needs Plan: 6th Cycle Regional Housing Needs Allocation 2023-2031*. [pg. 32]. June 23, 2022.



State Regulations

The following are applicable State regulations related to land use and planning/population and housing.

Title 14 California Code of Regulations Section 15131

Title 14, California Code of Regulations (CCR) Section 15131 provides that economic or social information may be included in an EIR, but those economic or social effects shall not be considered significant effects on the environment. In an EIR, the lead agency is responsible for researching economic or social changes resulting from a project, which may eventually lead to physical changes in the environment. Such economic or social changes can be used to determine the significance of physical changes on the environment.

Regional Housing Needs Plan

California General Plan law requires each city and county to have land zoned to accommodate a fair share of the regional housing need. (Government Code section 65584, et seq.) The share is known as a regional housing needs assessment or RHNA and is based on a regional housing needs plan or RHNP developed by each council of government. The state-mandated RHNA process (Government Code Sections 65580 et seq.) requires SJCOG to develop a methodology that determines how to divide and distribute an overall allocation that the region receives from the State.

Senate Bill 330

California Senate Bill (SB) 330, "The Housing Crisis Act of 2019," was signed into law by Governor Newsom on October 9, 2019 and became effective January 1, 2020. The bill establishes a statewide housing emergency to be in effect until January 1, 2025. During the housing emergency period, cities and localities in urban or "affected" areas, including the City of Manteca, are generally prohibited from downzoning actions or imposing new development standards that would reduce the zoned capacity for housing, or adopting new design standards that are not objective. In such affected jurisdictions, the demolition of existing housing units is only permitted if replacement units are provided. The demolition of existing low-income units is only permitted if certain conditions related to affordability and tenant protections are met.

Local Regulations

Relevant goals and policies from the Manteca General Plan and various other local guidelines and regulations related to land use, population and housing are discussed below.

Manteca General Plan

Specific goals and policies from the Manteca General Plan that have been adopted for the purpose of avoiding or mitigating an environmental effect are listed in Table 4.9-3 at the end of this chapter.

City of Manteca Right-to-Farm Ordinance

Chapter 8.24 of the Manteca Municipal Code contains the City's Right-to-Farm Ordinance intended to protect agricultural productivity in the City. The ordinance includes the following statement:

It is the policy of this City to preserve, protect and encourage the use of viable agricultural lands for the production of food and other agricultural products. When



nonagricultural land-uses extend into or approach agricultural areas, conflicts often arise between such land-uses and agricultural operations. Such conflicts often result in the involuntary curtailment or cessation of agricultural operations, and discourage investment in such operations. This chapter is intended to reduce the occurrence of conflicts between nonagricultural and agricultural land uses within the city.

San Joaquin Local Agency Formation Commission

The San Joaquin LAFCo Change of Organization Policies and Procedures includes General Standards for Annexation and Detachment that govern San Joaquin LAFCo determinations regarding annexations and detachments. Specific goals and policies from the General Standards for Annexation and Detachment that are applicable to the proposed project are listed in Table 4.9-2.

4.9.4 IMPACTS AND MITIGATION MEASURES

The following section describes the standards of significance and methodology used to analyze and determine the proposed project's potential impacts related to land use, planning, population, and housing. A discussion of the project's impacts, as well as mitigation measures where necessary, is also presented.

Standards of Significance

A land use and planning or population and housing impact may be considered to be significant if any potential effects of the following conditions, or potential thereof, would result with the proposed project's implementation:

- Physically divide an established community;
- 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;
- Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (e.g., through projects in an undeveloped area or extension of major infrastructure);
- Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere.

The proposed project's impacts associated with a conflict with an adopted habitat conservation plan are addressed in Chapter 4.4, Biological Resources, of this Draft EIR.

Method of Analysis

The following section analyzes the compatibility of the proposed project with surrounding land uses and compliance of the proposed project with adopted plans and policies, pursuant to Section 15125(d) of the CEQA Guidelines.

The evaluation considers the existing and planned type and intensity of uses in the project vicinity and those proposed for the project site. The analysis assumes the construction and implementation of the proposed project within the existing and planned environment to determine if the project is compatible with those existing and planned uses surrounding the project site. In addition, the proposed project is examined for consistency between the proposed project and San Joaquin LAFCo policies, as well as between the proposed project and the Manteca General Plan. For informational purposes, the proposed project is also examined for consistency between the



proposed project and the Manteca General Plan Update, which is anticipated to be adopted in the near future. The project's consistency with the City's Zoning Ordinance and the San Joaquin LAFCo policies are also discussed.

The level of significance of the impacts related to population and housing is determined by evaluating whether the proposed project either directly (for example, by proposing new homes and businesses) or indirectly (e.g., through projects in an undeveloped area or extension of major infrastructure), would induce substantial unplanned population growth in the project area.

Project-Specific Impacts and Mitigation Measures

The following discussion of land use, planning, population, and housing impacts is based on implementation of the proposed project unless otherwise noted.

4.9-1 Cause a significant environmental impact due to physically dividing an established community. Based on the analysis below, the impact is *less than significant*.

The proposed project would develop 738 residential structures, two neighborhood parks, an elementary/middle school, and associated circulation improvements on land that is designated for residential, park, and commercial uses. The proposed project would not inhibit access to nearby roadways; rather, the proposed project would increase connectivity to nearby communities by establishing new roadway connections between the project site and the Pillsbury Estates, Woodward Park, and Evans Estates communities to the north, east and west of the project site. Specifically, the future Antone Raymus Parkway is proposed along the southern boundary of the site, which would connect to Sedan Avenue and Manteca Road, and Pillsbury Road would be extended through the project site from the north to connect the proposed project to the existing northern residential communities. Additionally, Atherton Road on the eastern boundary of the site would be constructed. The proposed project would not cut off any existing or proposed transportation route that provides connectivity in the area. Therefore, the proposed project would not physically divide an established community. Thus, a *less-than-significant* impact would occur.

Mitigation Measure(s)

None required.

4.9-2 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. Based on the analysis below, the impact is *less than significant*.

The proposed project's consistency with the City of Manteca General Plan, Cortese-Knox-Hertzberg Local Government Reorganization Act, San Joaquin LAFCo policies, and the City's Right-to-Farm Ordinance are discussed below.



Manteca General Plan

The General Plan Guidelines published by the State Office of Planning and Research defines consistency as, “An action, program, or project is consistent with the general plan if, considering all its aspects, it will further the objectives and policies of the general plan and not obstruct their attainment.” Therefore, the standard for analysis used in this EIR is based on general agreement with the policy language and furtherance of the policy intent (as determined by a review of the policy context). The determination that the project is consistent or inconsistent with the City of Manteca General Plan policies or other City plans and policies is ultimately the decision of the City Council. Furthermore, although CEQA analysis may identify some areas of general consistency with City policies, the City has the ability to impose additional requirements or conditions of approval on a project, at the time of its approval, to bring a project into more complete conformance with existing policies.

A discussion of the project’s general consistency with policy language and furtherance of policy intent is discussed in further detail below. In addition, Table 4.9-3 at the end of this chapter lists the proposed project’s consistency with applicable Manteca General Plan policies related to land use. In anticipation of the adoption of the Manteca General Plan Update, a discussion of the proposed project’s consistency with the applicable Manteca General Plan Update policies related to land use is provided for informational purposes.

The project site is currently designated as UR-LDR, P, and CMU by the City of Manteca General Plan. The proposed project would require a GPA to the site’s land use designation to remove the CMU (approximately 7.6 acres) and UR-LDR designations to redesignate them to 152.4 acres of LDR. The amount of parkland within the project site would increase to approximately 16.2 acres from 8.1 acres and would be divided into two park areas located on the eastern and western sides of the Pillsbury Road extension. Therefore, a GPA would also be required for both the increase in parkland and the relocation of parkland within the project site. In addition, approximately 16.1 acres of PQP-designated land would be set aside for a proposed elementary/middle school (see Chapter 3, Figure 3-3). Pending the GPA approval, 168.6 acres of the project site would be designated LDR in the Manteca General Plan, which allows a density of 2.1 to 8.0 dwelling units per gross acre. The proposed project would consist of 634 detached single-family dwelling units and 104 half-plex units on approximately 152.4 acres, which results in an overall density of 4.9 dwelling units per acre (du/ac). Thus, the proposed project density would be consistent with the Manteca General Plan land use designation of LDR. Without approval of the GPA, the proposed elementary/middle school would not be an allowable use on the project site, nor would the amount of proposed parkland (16.2 acres) be able to be developed on the project site.

Currently employment growth is slower than population and housing growth within the City of Manteca; thus, the jobs-to-housing ratio within the City of Manteca is approximately 0.64. General Plan Implementation Policy ED-I-46 encourages large planned developments throughout the City to include a mix of housing types and density ranges to achieve a jobs/housing balance. As stated above, the proposed project would require a GPA to re-designate the 7.6 acres of CMU to LDR. According to the Manteca General Plan, a CMU designation includes a potential housing density of 15.1 to 25 du/ac while the LDR designation proposed as part of this project is 4.9



du/ac. Should the City Council approve the GPA redesignating the CMU to LDR, the housing density for the 7.6 acres would be reduced from a range of 15.1 to 25 du/ac to 4.9 du/ac, reducing the number of jobs needed for potential future residents. For instance, pursuant to the densities allowed in accordance with the project site's current land use designations, the site could be developed to consist of 1,417 dwelling units. As such, the reduction in dwelling units from the GP redesignation would be greater than the number of jobs lost from the redesignated 7.6 acres of CMU.

The requested GPA is a policy issue under the purview of the Manteca City Council. Although the proposed project includes a GPA request, the project site is currently designated for urban development. From a policy perspective, Table 4.9-3 at the end of this chapter demonstrates that the proposed project would be generally consistent with the policies in the General Plan adopted for the purpose of avoiding or mitigating an environmental effect. Should City Council approve the requested entitlements, the proposed project's impacts related to compliance with the Manteca General Plan would be less than significant.

City of Manteca Rezoning Requirement.

The proposed project site is currently located within unincorporated San Joaquin County and has a County zoning designation of General Agriculture (AG-40). Upon annexation to the City, to ensure compatibility with the Manteca General Plan land use designations for the site and consistent with the Cortese-Knox-Hertzberg Local Government Reorganization Act, the proposed project site would be rezoned to the PD-R-1, PQP, and P zoning districts (see Government Code Section 56375). In addition, the proposed project requires the approval of a Planned Development entitlement from the City of Manteca. The Planned Development would have modified standards for the proposed project to allow for the half-plex units. The proposed project would be required to comply with all requirements in the zoning ordinance including, but not limited to, parking, setbacks, landscaping, and the Planned Development. As a result, the project's impact related to compliance with the Manteca Zoning Ordinance would be less than significant.

San Joaquin LAFCo

As previously discussed, the proposed project site is currently located within unincorporated San Joaquin County and has a San Joaquin County General Plan land use designation of A/UR, and a County zoning designation of AG-40. The proposed project includes annexation from the County to the City of Manteca and detachment from the Lathrop-Manteca Fire Protection District and Ripon Fire District, which ultimately requires approval by the San Joaquin LAFCo. A discussion regarding the project's impacts on fire protection services and whether detachment from the Lathrop-Manteca Fire Protection District and Ripon Consolidated Fire District would cause any impacts associated with such services is provided in Chapter 4.11, Public Services, Recreation, Utilities, and Service Systems, of this Draft EIR. Table 4.9-2 below lists the proposed project's consistency with applicable San Joaquin LAFCo policies related to land use and planning.



Table 4.9-2 Discussion of Relevant San Joaquin LAFCo Policies	
San Joaquin LAFCo Policy	Discussion
<p><u>Plan for Services</u></p> <p>Every proposal must include a Plan for Services that addresses the items identified in Section 56653 of the Government Code. The Plan for Services must be consistent with the Municipal Service Review of the Agency.</p> <p>Proponents must demonstrate that the city or special district is capable of meeting the need for services.</p>	<p>The proposed project would provide the infrastructure necessary for the delivery of safe and reliable public services including water, sewer, drainage, and roadway improvements that would enhance the City of Manteca's infrastructure systems. The infrastructure systems installed as part of the proposed project would be sized to meet demands created by the proposed project. A more detailed discussion regarding public services and utilities for the project can be found in Chapter 4.11, Public Services, Recreation, Utilities, and Service Systems, of this Draft EIR. As determined in Chapter 4.11, the proposed project's impacts related to public services and utilities would be less than significant with implementation of the required mitigation measures where appropriate. Therefore, the proposed project would be consistent with the LAFCo policy.</p>
<p><u>Contiguity</u></p> <p>Territory proposed to be annexed to a city must be contiguous to the annexing city or district unless specifically allowed by statute. Territory is not contiguous if the only connection is a strip of land more than 300 feet long and less than 200 wide, that width to be exclusive of highways. The boundaries of a proposed annexation or reorganization must not create or result in areas that are difficult to serve.</p>	<p>The northern, western, and eastern boundaries of the project site are bounded by the city limits of Manteca. Therefore, the proposed project would be consistent with the LAFCo policy.</p>
<p><u>Progressive Urban Pattern</u></p> <p>Annexations to agencies providing urban services shall be progressive steps toward filling in the territory designated by the affected agency's adopted sphere of influence. Proposed growth shall be from inner toward outer areas.</p>	<p>The project site is located within the City's SOI. The West Parcel is within the City's 10-year Planning Horizon, while the East Parcel is within the City's 20-year Planning Horizon. The General Plan designates the site as UR-LDR, indicating that the site is recognized by the City as an area of future growth that may be annexed to the City at the appropriate time. All areas to the north and west of the project site have been or are being built out. Therefore, the proposed project would be consistent with the LAFCo policy.</p>

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Table 4.9-2
Discussion of Relevant San Joaquin LAFCo Policies

San Joaquin LAFCo Policy	Discussion
<p><u>Annexations to Eliminate Islands</u></p> <p>Proposals to annex islands or to otherwise correct illogical distortion of boundaries will normally be approved unless they would violate another provision of these standards. In order to avoid the creation of an island or to encourage the elimination of an existing island, detailed development plans may not be required for the remnant areas.</p>	<p>The project site is contiguous with City boundaries and would not create any islands within the City of Manteca upon annexation. Therefore, the proposed project would be consistent with the LAFCo policy.</p>
<p><u>Annexations that Create Islands</u></p> <p>An annexation will not be approved if it will result in the creation of an island of unincorporated territory or otherwise cause or further the distortion of existing boundaries. The Commission may nevertheless approve such an annexation where it finds that the application of this policy would be detrimental to the orderly development of the community and that a reasonable effort has been made to include the island in the annexation but that inclusion is not feasible at this time.</p>	<p>The project site is contiguous with City boundaries and would not create any islands within the City of Manteca upon annexation. Therefore, the proposed project would be consistent with the LAFCo policy.</p>
<p><u>Disadvantaged Unincorporated Communities (DUCs)</u></p> <p>DUCs are those territories shown in Exhibit A or as may be shown in a city municipal service review and sphere of influence plan.</p> <p>The Commission shall not approve an annexation to a city or any territory greater than 10 acres where there exists a disadvantaged unincorporated community (DUC) that is contiguous to the area of proposed annexation, unless a concurrent application to annex all or a portion of the DUC to the subject city has been filed. An application to annex a DUC shall not be required if either of the following applies:</p> <ol style="list-style-type: none"> 1. A prior application for annexation of the territory has been made in the preceding five years. 2. The Commission finds, based upon written evidence, that a majority of the registered voters within the DUC are opposed to annexation. 	<p>The proposed project site is not considered to be a DUC; nor is it located adjacent to a DUC. Therefore, the proposed project would be consistent with the LAFCo policy.</p>

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Table 4.9-2 Discussion of Relevant San Joaquin LAFCo Policies	
San Joaquin LAFCo Policy	Discussion
Written evidence can be a scientific survey conducted by an academic institution or professional polling company.	

As shown in the table above, adequate public services and utilities are available to serve the proposed project, the proposed project is contiguous with City boundaries and would not create an island, and the project does not involve or affect a disadvantaged community. Therefore, the project would result in a less-than-significant impact with regard to compatibility with San Joaquin LAFCo goals and policies.

City of Manteca Right-to-Farm Ordinance.

Approval of the proposed project would result in the development of 738 detached single-family units and half-plex units, 16.2 acres designated for park usage for the residents, and 16.1 acres designated for an elementary/middle school. Residential uses adjacent to other residential uses do not pose incompatibility issues. In addition, it should be noted that the proposed half-plex units in the East Parcel would be separated from the parcel's single-family residences by the school and parkland sites. Although, the half-plex units within the West Parcel would share property lines with single-family residential lots, the half-plex lots in the West Parcel would all be isolated along the central interior roadway within the parcel (Polk Street and Street H). As such, the half-plex units in both parcels would be sited such that the units would not be constructed in disparate locations that would create incompatibility issues.

However, the proposed residential and school uses could be considered incompatible with the agricultural land uses to the east and west of the site, due to noise, dust, and/or odor generation associated with typical agricultural operations. While development of the proposed project would occur adjacent to existing agricultural uses, such uses would be sufficiently separated by the buffering provided by the new roadways. The proposed project would construct Atherton Drive along the eastern border of the site and Antone Raymus Parkway along the southern border of the project site. The Atherton Drive and Antone Raymus Parkway ROWs would serve as a buffer between the proposed project and the ongoing agricultural operations to the east and south, consistent with the Manteca General Plan. Furthermore, State laws prevent pesticides from being sprayed and/or aerially applied within 0.25-mile of school uses. As such, there would not be any incompatible uses or activities.

The City has adopted a Right-to-Farm Ordinance (Manteca Municipal Code Chapter 8.24), which attempts to reduce conflicts between agricultural and non-agricultural uses in order to preserve and protect agricultural uses. Section 8.24.030 of the Right-to-Farm Ordinance requires any transferor of property within the city to deliver a disclosure statement to the buyer informing future residents that small-scale agricultural and farming operations may take place on nearby/surrounding parcels, which may result in physical impacts related to noise, dust, smoke, and odors. Section 8.24.040 provides the actual Disclosure Statement required to be provided to the buyer, and signed by both the seller and buyer. Furthermore, Section 8.24.050



includes a Disclosure Statement that is required to be submitted prior to issuance of each building permit.

Physical environmental impacts related to areas such as noise, air quality, and traffic that would arise from development of the proposed project are assessed in other chapters of this Draft EIR (see Chapter 4.3, Air Quality, Greenhouse Gas Emissions, and Energy; Chapter 4.10, Noise; and Chapter 4.12, Transportation, Traffic, and Circulation for further analysis of these issues). While development of the proposed project would occur near existing agricultural uses, such uses would be sufficiently separated by the buffering provided by the new roadways. Moreover, the City's Right-to-Farm Ordinance requires clear disclosure and notification of such agricultural uses prior to the issuance of any building permit. Accordingly, the project would have a less than significant impact on the City Right-to-Farm Ordinance.

Conclusion

The proposed project would require annexation approval by San Joaquin LAFCo and approval of a GPA and Rezoning by the City Council. As discussed above, annexation of the project site would be consistent with the San Joaquin LAFCo policies regarding land use and planning. Should the City Council approve the requested entitlements, the project would be consistent with the City's General Plan and Zoning Code. Finally, because the City's Right-to-Farm Ordinance requires all transfers of real property to notify and disclose nearby agricultural uses, there would be a ***less-than-significant*** impact in relation to conflicting with a land use regulation adopted for the purpose of avoiding or mitigating an environmental effect.

Mitigation Measure(s)

None required.

4.9-3 Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (e.g., through projects in an undeveloped area or extension of major infrastructure). Based on the analysis below, the impact is *less than significant*.

Growth can be induced in a number of ways, including through the elimination of obstacles to growth or through the stimulation of economic activity within the region. Examples of projects likely to have growth-inducing impacts include extensions or expansions of infrastructure systems beyond what is needed to serve project-specific demand, and development of new residential subdivisions or office complexes in areas that are currently only sparsely developed or are undeveloped, or in areas not currently planned for development. The following sections describe potential effects related to direct and indirect population growth associated with implementation of the proposed project.

Direct Population Growth

As currently designated, the project site consists of 168.6 acres of UR-LDR, 7.6 acres of CMU, and 8.1 acres designated Park. The current UR-LDR designation allows for



2.1 to 8.0 du/ac; thus, the UR-LDR portion of the project site could be developed with up to 1,349 residential units. The CMU-designated land allows for commercial and office components that would serve surrounding neighborhoods, rather than areas providing a primarily residential purpose. In new urbanizing areas such as the project site, the General Plan anticipated that the mixed-use concept provided by the CMU designation would accommodate only 35 percent of the land area allocated to high-density residential uses. As such, under the CMU designation, the General Plan assumed that approximately 2.7 acres (35 percent) of the 7.6-acre CMU parcel would be developed with residences. The City of Manteca's CMU designation provides for a potential housing density of 15.1 to 25 du/ac. Therefore, residential development on the 7.6-acre CMU lot could accommodate up to 68 residential units, or 204 new residents. Overall, under the existing General Plan designations, the project site could be developed with up to 1,417 residential units, and 4,251 new residents.

Based on 738 single-family residential and half-plex dwelling units and the City's three persons per household statistic, the proposed project could generate 2,214 new residents for the City of Manteca.¹⁰ Per the City's population projections, as presented in Table 4.9-1, the population is anticipated to increase from 2020 to 2030 by 20,295. Assuming that the proposed project would be fully built out and operating at full capacity by 2030, the project's contribution to the overall population increase by 2030 would be approximately 11 percent, and would not contribute to an increase above the anticipated population levels.

In order to ensure that population growth does not outpace availability of adequate infrastructure, the City has adopted a Growth Management Ordinance (Chapter 18.04 of City Municipal Code) that states that any project seeking sewer capacity shall first obtain project allocations prior to issuance of building permits. Compliance with the City's Growth Management Ordinance would ensure that the City has adequate sewer infrastructure available and the ability to provide adequate sewer services to the proposed project. The proposed project's impacts related to sewer services, as well as other public services and utilities, are discussed in further detail in Chapter 4.11, Public Services, Recreation, Utilities, and Service Systems, of this Draft EIR. As determined in Chapter 4.11, sewage infrastructure included as part of the proposed project would be sufficient to serve the proposed project without requiring the relocation or construction of new or expanded wastewater treatment facilities, and the proposed project's overall impacts related to public services and utilities would be less than significant with implementation of the required mitigation measures where appropriate.

Following the proposed redesignation of the site, 152.4 acres of the site would be designated LDR, and the remainder of the site would be designated for non-residential land uses. Per the allowable density of 2.1 to 8.0 du/ac, the 152.4-acre parcel could support 320 to 1,218 residential units, or 960 to 3,654 residents.

Finally, with respect to the proposed Antone Raymus Parkway, the new road would be constructed over two phases, interim condition and ultimate condition. The proposed project would be responsible for development of only the road's interim condition. Under the interim condition, Antone Raymus Parkway would consist of two

¹⁰ City of Manteca. *City of Manteca 2015-2023 Housing Element*. Adopted January 19, 2016.



travel lanes and a center turn lane along the southern boundary of the project site. Under the ultimate condition, Under the interim condition, the project applicant would be required to dedicate ROW to accommodate a 65.5-foot half-width street section. The project would construct a new street structural section, curb, gutter, an eight-foot-wide meandering sidewalk parallel to the north of the road, landscaping with trees and an automatic irrigation system, street lights, signage, and striping. The improvements would be constructed from Main Street to the Atherton Drive extension. The Antone Raymus Parkway/Pillsbury Road intersection would be stop-controlled. Funding for Antone Raymus Parkway improvements under the ultimate condition would be the responsibility of future developers. Therefore, development of the road would not be growth-inducing, as the interim and ultimate conditions of the road would be constructed only as development occurs at the project site and on parcels adjacent to the site.

Based on the density calculations above, the proposed General Plan Amendment would result in a potential change in population from 1,182 to 4,251 residents under the current designation to 960 to 3,654 residents under the proposed designation. Therefore, the proposed project would not result in a significant reduction in population density on the project site.

Indirect Population Growth

The proposed project would result in an increase of the permanent population on the project site by approximately 2,214 residents. This new residential population would likely patronize local businesses and services in the area, fostering economic growth. While construction of the proposed project would result in increased employment opportunities in the construction field, which could potentially result in increased permanent population and demand for housing in the vicinity of the project site, employment patterns of construction workers is such that construction workers would not likely, to any significant degree, relocate their households as a result of the construction-related employment opportunities associated with the proposed project.

Although the project would provide short-term employment opportunities, which would likely be filled from the local employee base, with the possible exception of a few household and landscape maintenance jobs, no permanent jobs would be created by the proposed project. In addition, because the proposed project would redesignate 7.6 acres of the site from CMU to LDR, new commercial or office jobs would not be created at the project site. Therefore, the project would not result in long-term employment growth in the area. Furthermore, the residential population generated by the proposed project would result in an increased demand for public services. However, as discussed in Chapter 4.11, Public Services, Recreation, Utilities, and Service Systems, the project's demand for public services could be accommodated by existing services and would not create a need for new or altered governmental facilities.

Finally, as discussed above development of the proposed Antone Raymus Parkway would not be growth-inducing, as the interim and ultimate conditions of the road would be constructed only as development occurs at the project site and on parcels adjacent to the site. Therefore, construction of Antone Raymus Parkway would not indirectly facilitate development that the General Plan EIR had not previously anticipated and would not indirectly induce population growth.



Conclusion

Considering the above, the proposed project would include development that would result in direct on-site population growth. However, population growth resulting from the proposed project would be within the General Plan and SJCOG growth estimates for the project area. In addition, compliance with the City's Growth Management Ordinance would further ensure that population growth does not outpace availability of adequate infrastructure. Based on the above, impacts related to the direct or indirect inducement of substantial population growth would be considered ***less than significant***. It should be noted that potential impacts related to growth inducement are discussed further within Chapter 5, Statutorily Required Sections, of this EIR, consistent with Section 15126.2(d) of the CEQA Guidelines.

Mitigation Measure(s)

None required.

4.9-4 Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere. Based on the analysis below, the impact is *less than significant*.

The project site is currently used for agricultural purposes. The only residential structure on the project site is a 20,000-sf residence within the East Parcel, owned by the Hat family. The proposed project would include demolition of the existing residence and the development of single-family residences consistent with the surrounding residential lots. However, demolition would not result in the displacement of substantial numbers of existing people or housing, as the residence would be replaced with single-family residences. Therefore, a ***less-than-significant*** impact would occur.

Mitigation Measure(s)

None required.

Cumulative Impacts and Mitigation Measures

The following discussion of impacts is based on the implementation of the proposed project in combination with other proposed and pending projects in the region.

4.9-5 Cause a significant cumulative 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. Based on the analysis below, the cumulative impact is *less than significant*.

Land use plans or policies and zoning generally do not combine to result in cumulative impacts. The determination of significance for impacts related to such issues is whether the project would 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. Such a conflict is site-specific, and, thus, is only addressed on a project-by-project basis. As shown in Table 4.9-3 of this chapter, the



proposed project would be generally consistent with relevant policies in the City of Manteca General Plan.

Therefore, the proposed project would not cause a significant cumulative 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, and the cumulative impact would be ***less-than-significant***.

Mitigation Measure(s)

None required.

4.9-6 Cause a significant cumulative environmental impact due to cumulative unplanned population growth. Based on the analysis below, the cumulative impact is *less than significant*.

The Manteca General Plan enables residential growth and identifies the necessary infrastructure improvements needed to keep pace with that growth by providing a plan for future roads, utilities, and government services to support future growth. The new residences provided by the proposed project would fall within the General Plan and SJCOG's growth estimates for the City of Manteca and for the region. The direct and indirect impacts of population and housing growth on the project site are considered throughout this Draft EIR and include potential impacts to traffic, air quality, noise, the provision of public services and utilities, and other resource areas. To the extent that the projected population would result in significant adverse effects to such resources, the impacts have been identified and considered within relevant sections of this Draft EIR.

Because the population projected for the proposed project, and the cumulative population growth of other similar projects within the City, are within SJCOG population projections, the increase in population has been anticipated by the various utilities and public service providers and other agencies that rely on SJCOG's population projections for future impacts on various services. As a result, the increase in housing and population created by the proposed project would not be considered to result in a significant incremental contribution to the cumulative impact on population, housing, or employment growth. Further, while buildout of the 7.6 acres of the project site to the maximum density allowable under the CMU designation is unlikely, the GPA for the proposed project would still reduce the number of future residents for the site from 4,617 residents to 2,214 residents. Considering the above, construction of the proposed project, along with future development occurring under the buildout of the City's General Plan, would result in a ***less-than-significant*** cumulative impact related to unplanned population growth.

Mitigation Measure(s)

None required.



**Table 4.9-3
Discussion of Relevant Manteca General Plan Policies**

General Plan Policy	Draft General Plan Update Policy	Discussion
Land Use Element		
<p>LU-P-3 The City shall encourage a pattern of development that promotes the efficient and timely development of public services and facilities.</p>	<p>LU-2.6 Evaluate applications for annexations based upon the following criteria:</p> <ul style="list-style-type: none"> • The annexation shall mitigate its impacts through consistency with the General Plan goals and policies and shall provide a positive benefit to Manteca; • The annexation area is contiguous with city boundaries and provides for logical expansion and development; • The annexation area creates clear and reasonable boundaries for the City and service providers; • The annexation area will be adequately served by municipal services; • The annexation, when reviewed cumulatively with other annexations, provides a long-term fiscal balance for the City and its residents; • The annexation is consistent with State law and San Joaquin County LAFCo standards; • The annexation is consistent with the General Plan; • The annexation contributes its fair share to applicable infrastructure and public service needs, including facilities 	<p>Public services are discussed in Chapter 4.11 of this Draft EIR. Per the Public Facilities Implementation Plans provided for both parcels, the proposed project would provide new water and sewer lines within the future Antone Raymus Parkway to connect to existing lines in adjacent roadways (i.e., Atherton Drive, Manteca Road). Stormwater infrastructure would be developed within the Pillsbury Road extension and connect to a South San Joaquin Irrigation District (SSJID) connection point north of the project site. Gas and electricity would be provided to the proposed project by Pacific Gas & Electric (PG&E), and the installation and/or reinstallation of dry utilities infrastructure would be performed in accordance with City requirements.</p> <p>Existing and/or proposed residential development are located to the north, west, and east of the project site. Access to the project would be provided by Pillsbury Road via Woodward Avenue. In addition, the future Antone Raymus Parkway along the southern boundary would provide project access. Based on the above, the proposed project would be consistent with the General Plan Policy and the Draft General Plan Update Policy.</p> <p>It should be noted that Draft General Plan Update Policy LU-2.6 contains several additional provisions regarding the evaluation of annexation criteria, including contiguous boundaries with the City of Manteca, impacts on agricultural lands, and the promotion of environmental justice. A discussion of the proposed project's consistency with San Joaquin County LAFCo policies regarding annexation is provided under Impact</p>



Table 4.9-3
Discussion of Relevant Manteca General Plan Policies

General Plan Policy	Draft General Plan Update Policy	Discussion
	<p>identified in the Regional Transportation Plan, Public Facilities Implementation Plan, and Capital Improvement Plan;</p> <ul style="list-style-type: none"> • The effect of the proposal on maintaining the physical and economic integrity of agricultural lands and achievement of Resource Conservation and Community Design Elements goals; • The extent to which the proposal will assist the City in achieving the adopted fair share of the RHNA as determined by the SJCOG; • The extent to which the proposal will assist the City in achieving the adopted fair share of the RHNA as determined by the SJCOG; • The extent to which the proposal will promote environmental justice. As used in this policy, “environmental justice” means the fair treatment of people of all races, cultures, and incomes with respect to the location of public facilities and the provision of public services; • The extent in which the proposal facilitates achievement of the City’s job/housing balance goal of a 1:1 ratio. 	<p>4.9-2 of this chapter. An analysis of the proposed project’s potential impact on agricultural land and public utilities is provided in Chapter 4.2, Agricultural Resources, and Chapter 4.11, Public Services, Recreation, Utilities, and Service Systems, of this EIR. Lastly, a discussion of the proposed project’s compliance with environmental justice standards is presented under Draft General Plan Update Policy LU-9.2. Overall, the proposed project would be consistent with the annexation criteria provided in Policy LU-2.6 of the Draft General Plan Update.</p>



Table 4.9-3
Discussion of Relevant Manteca General Plan Policies

General Plan Policy	Draft General Plan Update Policy	Discussion
LU-P-4 The City shall encourage a development pattern that is contiguous with the boundary of the City.	LU-2.3 To maintain balanced growth and to manage the City's investment in infrastructure, facilities, and services for growth areas, encourage infill development, redevelopment, and rehabilitation projects within the City and growth that is contiguous with existing development and/or the boundary of the City.	The project site is within the City of Manteca SOI and the site's northern, western, and eastern boundaries are contiguous with the existing Manteca City limit line. The proposed project would be located adjacent to existing residential development to the west and north of the project site. Based on the above, the proposed project would be contiguous with City boundaries and existing residential development and therefore consistent with the General Plan Policy and the Draft General Plan Update Policy.
LU-P-13 The City may designate areas on the Land Use Map as Urban Reserve. Such areas are not planned for development prior to 2023, but are recognized by the City as areas of future growth that may be annexed to the City at the appropriate time.	LU-2.5 Lands within the SOI that are not designated with the Urban Reserve Overlay are intended to serve as the Primary Urban Service Area and be planned for development during the General Plan horizon (2040). Lands within the SOI that are designated with the Urban Reserve Overlay as well as lands within the Planning Area that are outside of the SOI are anticipated to accommodate the City's long-term growth and are intended to serve as the Secondary Urban Service Area.	The current General Plan land use map designates the project site as UR-LDR. The West Parcel is within the City's 10-year Planning Horizon, while the East parcel is within the City's 20-year planning horizon. The proposed project is anticipated to be developed by 2035. Therefore, the proposed project would be generally consistent with this measure. In addition, the Draft General Plan Update would redesignate the site as LDR, PQP, and P without the Urban Reserve Overlay. Policy LU-2.5 of the General Plan Update states that lands within the SOI that are not designated with the Urban Reserve Overlay are intended to serve as the Primary Urban Service Area and be planned for development during the General Plan horizon (2040). Therefore, the proposed project would be consistent with General Plan and Draft General Plan Update policies regarding annexation of lands within the SOI.
LU-P-37 The City shall designate adequate land, appropriately located for City, County, and School District facilities.	LU-7.1 Designate adequate land, appropriately located for City, County, and school district facilities, and ensure that adequate sites for necessary community facilities are included and addressed in new residential communities,	The proposed project would develop approximately 740 residential units, many of which are anticipated to house families with school-aged children. Therefore, the proposed project would include the development of a new elementary/middle school capable of serving up to 300 students at the Kindergarten to 8 th grade levels. Based on the above, the proposed project would be



Table 4.9-3
Discussion of Relevant Manteca General Plan Policies

General Plan Policy	Draft General Plan Update Policy	Discussion
	subdivisions, specific plans, and master plans.	consistent with the General Plan Policy and the Draft General Plan Update Policy.
LU-P-47 The City shall develop and apply standards for pedestrian circulation that enable residents to select a reasonably direct and safe pedestrian route to schools, parks, transit stops, and commercial services.	LU-3.6 Encourage new neighborhoods to include a mix and distribution of land uses, including schools, parks, shopping, restaurants, and services, that reduce auto trips and support walking, biking, and transit use.	The proposed project would include the development of a new elementary/middle school in the East Parcel and two neighborhood parks located on either side of the proposed extension of Pillsbury Road. Locating public parks and schools near residential development would reduce auto trips that would typically be generated by residents travelling to similar uses outside of the project vicinity. In addition, the proposed project would include a robust sidewalk network connecting the proposed residences to the proposed parks and elementary/school, thus increasing pedestrian connectivity to these uses. In addition, the Austin Road Business Park is planned for development to the east of the project site and would be within 0.25-mile to one mile of the proposed residences; thus, commercial and business uses would be within reasonable walking distance of the project site upon development of the Austin Road Business Park. Based on the above, the proposed project would be consistent with the General Plan Policy and the Draft General Plan Update Policy.
<i>*The Draft General Plan Update Policy does not have a corresponding policy within the existing General Plan Land Use Element. Therefore, the discussion is limited to proposed project consistency with the Draft General Plan Update Policy.</i>	LU-3.8 Where planned residential areas and existing residential neighborhoods interface with commercial, industrial, and other non-residential development, require that the development be designed to maximize the compatibility between the uses and reduce any potential negative impacts associated with aesthetics, noise, safety, odor, and lighting.	The proposed project would be bordered by agricultural land to the east and south upon project completion. Several features would be included to maximize the compatibility between the proposed residential uses and surrounding agricultural uses, including the future Antone Raymus Parkway and the future extension of Atherton Drive; sound walls between the new roadways and the rear sides of the proposed residences, which would shield the residences from noise and visual impacts from the roadways and agricultural uses; and, pursuant to Manteca Municipal Code Chapter 8.24, the proposed project would be required as part of any



**Table 4.9-3
Discussion of Relevant Manteca General Plan Policies**

General Plan Policy	Draft General Plan Update Policy	Discussion
		transfer of property to deliver a disclosure statement to the buyer that informs future residents that small-scale agricultural and farming operations may take place on nearby/surrounding parcels, which may result in physical impacts related to noise, dust, smoke, and odors. Therefore, the proposed project would be consistent with the Draft General Plan Update Policy.
<i>*The Draft General Plan Update Policy does not have a corresponding policy within the existing General Plan Land Use Element. Therefore, the discussion is limited to proposed project consistency with the Draft General Plan Update Policy.</i>	LU-7.5 To the extent feasible, encourage school districts to locate school sites within easy walking distance of a large percentage of the student population and in areas where there are existing or planned safe routes to school (complete sidewalk/bike lane access from the residential neighborhoods within the enrollment boundary).	Please see the above discussion for LU-7.1. The proposed project would dedicate approximately 16.1 acres for an elementary/middle school capable of serving 300 students from the Kindergarten to 8 th grade levels. Existing and proposed residential development exists along the western, eastern, and northern boundaries of the project site, including the existing Pillsbury Estates, Woodward Park, and Evans Estates communities and the planned Austin Park Business Park and Residential Community. Given the large number of planned and existing single-family residences surrounding the project site, a large percentage of the student population is anticipated to reside in the project vicinity. The proposed project would include sidewalks which would connect to existing and planned sidewalks within the surrounding communities. Therefore, the proposed project would be consistent with the Draft General Plan Update Policy.
<i>*The Draft General Plan Update Policy does not have a corresponding policy within the existing General Plan Land Use Element. Therefore, the discussion is limited to proposed project consistency with the Draft General Plan Update Policy.</i>	LU-9.2 As part of land use decisions, ensure that environmental justice issues related to potential adverse health impacts associated with land use decisions, including methods to reduce exposure to hazardous materials, industrial activity, vehicle exhaust, other sources of pollution, and excessive noise on residents regardless of age, culture, gender,	A detailed discussion regarding the potential for future residents to be exposed to hazardous materials can be found in Chapter 4.7, Hazards and Hazardous Materials, of this EIR. An analysis of the potential impacts of vehicle exhaust, odors, toxic air contaminants, and other sources of pollution is provided in Chapter 4.3, Air Quality, Greenhouse Gas Emissions, and Energy, while potential noise impacts are thoroughly discussed in Chapter 4.10 Noise, of this EIR. As determined in Chapter 4.3, Chapter 4.7, and Chapter



**Table 4.9-3
Discussion of Relevant Manteca General Plan Policies**

General Plan Policy		Draft General Plan Update Policy	Discussion
		race, socioeconomic status, or geographic location, are considered and addressed.	4.10, the proposed project's impacts related to hazardous materials, air quality and greenhouse gas emissions, and noise would be less than significant with implementation of the required mitigation measures where appropriate. Therefore, the proposed project would be consistent with the Draft General Plan Update Policy.
Growth Management Element			
*The current General Plan does not contain a Growth Management Element. Therefore, the discussion is limited to proposed project consistency with the Draft General Plan Update Policy.		GM-1.1 Maintain a Growth Management Program that requires new development to meet and address level of service standards for water, sewer, circulation, schools, parks, public safety, and other necessary services and facilities and demonstrate consistency with the General Plan.	Please see the above discussion for LU-2.6. The proposed project has prepared Public Facility Implementation Plans, Utility Plans, and Circulation Plans consistent with city standards for the operation of utility and roadway infrastructure. The Ripon Unified School District (RUSD) would have ultimate discretion over the design and operation of the proposed school, while operation of the two neighborhood parks would fall under the responsibility of the City of Manteca Parks and Recreation Department. Should the City Council approve the GPA and Prezone, the proposed residences, parks, and school would be consistent with the corresponding General Plan land use designations of LDR, P, and PQP. Therefore, the proposed project would be consistent with the Draft General Plan Update Policy.
Community Design Element			
CD-P-21	Provide parks and schools as distinct centers for neighborhoods.	CD-4.7 Design neighborhoods in new growth areas to incorporate a distinct center, such as an elementary school, neighborhood park(s), and/or a mixed-use commercial area within a reasonable walking distance of the homes, approximately one-half mile.	The proposed project reserves approximately 16.1 acres of land for an elementary/middle school and dedicates approximately 16.2 acres of land for neighborhood parks. The parks would include amenities such as active play areas, sports fields, dining areas, and walking paths. The two parks would be located on either side of the Pillsbury Road extension and, thus, within a reasonable walking distance from the proposed residences (less than 0.5-mile). Therefore, the



**Table 4.9-3
Discussion of Relevant Manteca General Plan Policies**

General Plan Policy	Draft General Plan Update Policy	Discussion
		proposed project would be consistent with the General Plan Policy and the Draft General Plan Update Policy.
CD-P-25 The City shall encourage mixed land uses but provide physical separation or design buffers between incompatible land uses.	CD-6.1 Encourage the mixing of land uses, where appropriate, but provide physical separation and/or buffers between incompatible land uses.	The proposed project would be consistent with the existing residential uses to the north (South of Woodward Avenue project and Pillsbury Estates) and west (Evans Estates) of the site, and the proposed residential uses to the east (Austin Road Business Park and Residential Community) of the site. It should be noted that right-of-way along the eastern edge of the project site is being dedicated for the future Atherton Drive extension, which would provide a buffer between the proposed project and the ongoing agricultural operations to the east until such time as the planned residential development occurs. Similarly, right-of-way would be dedicated along the Antone Raymus Parkway to provide a buffer between the proposed residences and the agricultural operations to the south. Therefore, the proposed project would be consistent with the General Plan Policy and the Draft General Plan Update Policy.
Economic Development Element		
ED-I-46 Encourage specific plans and large planned developments throughout the City to include a mix of housing types and density ranges (consistent with the zoning ordinance) related to local wage structures to achieve a jobs/housing balance.	ED-4c Encourage specific plans and large planned developments throughout the City to include a mix of housing types and density ranges (consistent with the zoning ordinance) related to local wage structures to achieve a jobs/housing balance.	Approximately 7.6 acres of the project site are designated CMU. The proposed project would require approval of a GPA redesignating the 7.6 acres designated CMU to LDR. According to the Manteca General Plan, a CMU designation includes a potential housing density of 15.1 to 25 du/ac while the LDR proposed in this project is 4.9 du/ac. Although buildout of 7.6 acres of the project site according to the maximum density allowed by the existing CMU designation is unlikely given General Plan buildout assumptions that CMU land uses would be primarily commercial or office-oriented, should the City Council approve the GPA re-designating the CMU to LDR, the housing density for the 7.6 acres would be reduced to



**Table 4.9-3
Discussion of Relevant Manteca General Plan Policies**

General Plan Policy	Draft General Plan Update Policy	Discussion
		4.9 du/ac rather than 15.1 to 25 du/ac, which would reduce the number of jobs needed for potential future residents. The reduction in dwelling units from the re-designation would be greater than the number of jobs lost from the re-designated 7.6 acres of CMU. In addition, as the proposed project would consist of 634 single-family residences and 104 half-plex units, the project would offer a mix of housing types and density ranges. Therefore, the proposed project would be consistent with the General Plan Policy and the Draft General Plan Update Policy.
Resource Conservation Element		
RC-P-16 Provide public and private open space within urbanized parts of Manteca, in order to provide visual contrast with the built environment and to provide for the recreational needs of residents.	RC-7.8 Provide public and private open space within urbanized parts of Manteca, in order to provide for the recreational needs of residents and provide visual contrast with the built environment.	The proposed project would dedicate approximately 16.2 acres of land to two neighborhood parks. The parks would include recreational amenities such as active play areas, sports fields, and dining areas, as well as visual components to enhance the natural aesthetics of the open space areas, including walking paths and pedestrian bridges over water channels. In addition, open space areas within the proposed residences would include porch areas, outdoor living areas, and private open space within the backyards. Based on the above, sufficient public and private open space would be provided as part of the proposed project to meet the recreational needs of future residents and to provide visual contrast with the built environment. Therefore, the proposed project would be consistent with the General Plan Policy and the Draft General Plan Update Policy.
RC-P-19 The City shall support the continuation of agricultural uses on lands designated for urban use, until urban development is imminent.	RCP-8.1 Support the continuation of agricultural uses on lands designated for urban use, until urban development is imminent.	The project site is currently agricultural land. It should be noted, however, that the project site is surrounded by existing, under construction, proposed, and/or planned residential development. The Pillsbury Estates and Woodward Park residential developments north of the site are either completed or currently under



**Table 4.9-3
Discussion of Relevant Manteca General Plan Policies**

General Plan Policy	Draft General Plan Update Policy	Discussion
		construction, the Evans Estates residential community is under construction to the west, and an approved residential development currently under agricultural use is to the east. Pursuant to Manteca Municipal Code Chapter 8.24, the proposed project would be required as part of any transfer of property to deliver a disclosure statement to the buyer that informs future residents that small-scale agricultural and farming operations may take place on nearby/surrounding parcels, which may result in physical impacts related to noise, dust, smoke, and odors. Therefore, the proposed project would be consistent with the General Plan Policy and the Draft General Plan Update Policy.
RC-P-20 The City shall provide an orderly and phased development pattern so that farmland is not subjected to premature development pressure.	RC-8.2 Provide an orderly and phased development pattern, encouraging the development of vacant lands within City boundaries prior to conversion of agricultural lands, so that farmland is not subjected to premature development pressure.	Please see above discussion for LU-P-4 and RC-P-19. Although the project site is currently used for agricultural purposes, existing or planned residential development is located on the eastern, western, and northern borders of the project site. The project site is contiguous with City boundaries, within the City's SOI, and has been designated with the Urban Reserve Overlay, indicating that the site has been planned for development by the City. It should be noted that the Draft General Plan Update would remove the Urban Reserve Overlay, which would place the site within the Primary Urban Service Boundary and make the site eligible for annexation within the Draft General Plan Update's Planning Horizon (2040). Based on the above, the proposed project would be consistent with the General Plan Policy and the Draft General Plan Update Policy.
RC-P-25 The City shall ensure, in approving urban development near existing agricultural lands, that such development will not unnecessarily constrain agricultural practices or	RC-8.6 Ensure that urban development near existing agricultural lands will not unnecessarily constrain agricultural practices or adversely affect the economic viability of nearby	Please see above discussion for CD-P-25 and RC-P-19. In addition, Impact 4.9-3 includes mitigation requiring deed notification for future property owners, consistent with the City's Right-to-Farm Ordinance. The deed notification would include a disclosure statement



Table 4.9-3
Discussion of Relevant Manteca General Plan Policies

General Plan Policy	Draft General Plan Update Policy	Discussion
adversely affect the economic viability of nearby agricultural operations.	agricultural operations.	of the project's proximity to existing and ongoing agricultural activities and potential issues associated with such, including potential inconvenience or discomfort from typical agricultural operations on the nearby site. Based on the above, the proposed project would be consistent with the General Plan Policy and the Draft General Plan Update Policy.
<p>RC-I-30 Apply the following conditions of approval where urban development occurs next to farmland.</p> <ul style="list-style-type: none"> Require notifications in urban property deeds that agricultural operations are in the vicinity, in keeping with the City's right-to-farm ordinance. Require adequate and secure fencing at the interface of urban and agricultural use. Require phasing of new residential subdivisions; so as to include an interim buffer between residential and agricultural use. 	<p>RC-8e Apply the following conditions of approval where urban development occurs next to farmland.</p> <ul style="list-style-type: none"> Require notifications in urban property deeds that agricultural operations are in the vicinity, in keeping with the City's right-to-farm ordinance. Require adequate and secure fencing at the interface of urban and agricultural use. Require phasing of new residential subdivisions; so as to include an interim buffer between residential and agricultural use. Require a buffer, which may include a roadway and landscaped buffer, open space transition area, or low intensity uses, between urban uses and lands designated Agriculture on the Land Use Map. 	<p>Please see above discussion for CD-P-25 and RC-P-25. The conditions described in the General Plan Policy would be included as conditions of approval for project, and the required buffer between the proposed project and agricultural uses to the east and south would be provided by the right-of-way along future Atherton Drive and the right-of-way along the Antone Raymus Parkway, respectively. Therefore, the proposed project would be consistent with the General Plan Policy and the Draft General Plan Update Policy.</p>



Table 4.9-3
Discussion of Relevant Manteca General Plan Policies

General Plan Policy		Draft General Plan Update Policy	Discussion
Housing Element			
H-P-20	The City shall regulate the number of housing units approved each year according to a growth management system that reflects the availability of infrastructure, the City's ability to provide public services, housing needs, and employment growth.	<i>*The Draft General Plan Update would not amend the currently adopted version of the 2016 Housing Element. The General Plan Policy would remain in effect.</i>	Please see above discussion for LU-P-3. The proposed project's increase in population would be within the anticipated projected increase for the City. In addition, per the City's Growth Management Ordinance, the project would be required to obtain project allocations prior to issuance of any building permits, which would ensure that the City has adequate sewer infrastructure to serve the project. The proposed project's impacts related to sewer services, as well as other public services and utilities, are discussed in further detail in Chapter 4.11, Public Services, Recreation, Utilities, and Service Systems, of this Draft EIR. Overall, the proposed project would be consistent with the General Plan Policy.
H-P-22	The City shall seek the annexation of lands within the City's adopted Sphere of Influence and identified 10- and 20-year Planning Horizons at a rate that ensures an adequate supply of appropriately zoned residential land.	<i>*The Draft General Plan Update would not amend the currently adopted version of the 2016 Housing Element. The General Plan Policy would remain in effect.</i>	The project site is located within the City of Manteca's SOI and is adjacent to currently approved and proposed developments to the north, east, and west of the site. The West Parcel is located within the City's 10-year Planning Horizon, while the East Parcel is located within the City's 20-year Planning Horizon. Therefore, the proposed project would be consistent with the General Plan Policy.
HP-P-25	The City will consider new housing construction methods and dwelling unit types that encourage affordability through innovative design such as small lot subdivisions and second units.	<i>*The Draft General Plan Update would not amend the currently adopted version of the 2016 Housing Element. The General Plan Policy would remain in effect.</i>	The proposed project would develop 740 residential units on the project site. Approximately 112 of the units would be half-plex units, which are typically two attached units sold individually. The inclusion of half-plex units would be an affordable alternative to the purchase of the larger single-family residential units. Thus, the proposed project would comply with the General Plan Policy.



4.10 NOISE

4.10 NOISE

4.10.1 INTRODUCTION

The Noise chapter of the EIR describes the existing noise environment in the project vicinity, and evaluates potential noise and vibration impacts associated with implementation of the proposed project. The method by which the potential impacts are analyzed is discussed, followed by the identification of potential impacts and the recommended mitigation measures designed to reduce significant noise and vibration impacts to less-than-significant levels, if required. The analysis presented herein is primarily based on information sourced from an Environmental Noise Assessment prepared by j.c. brennan & associates, Inc. for the proposed project (see Appendix H of this EIR),¹ as well as a Traffic Noise Review prepared by Saxelby Acoustics (see Appendix I of this EIR),² the Manteca General Plan,³ and the Manteca General Plan EIR.⁴

In response to the Notice of Preparation (NOP), the City received comments related to noise regarding the potential for the proposed project to permanently increase ambient noise levels in the project vicinity from the proposed residences, traffic, and the school site, as well as temporarily increase noise levels due to project construction. The comments have been carefully reviewed and considered by the City of Manteca and are reflected in the analysis of impacts in this chapter.

4.10.2 EXISTING ENVIRONMENTAL SETTING

The Existing Environmental Setting section provides background information on noise and vibration, a discussion of acoustical terminology and the effects of noise on people, existing sensitive receptors in the project vicinity, existing sources and noise levels in the project vicinity, and groundborne vibration.

Acoustical Terminology

Acoustics is the science of sound. Sound may be thought of as mechanical energy of a vibrating object transmitted by pressure waves through a medium to human (or animal) ears. If the pressure variations occur frequently enough (at least 20 times per second), then they can be heard and are called sound. The number of pressure variations per second is called the frequency of sound, and is expressed as cycles per second or Hertz (Hz).

Noise is a subjective reaction to different types of sounds. Noise is typically defined as (airborne) sound that is loud, unpleasant, unexpected or undesired, and may therefore be classified as a more specific group of sounds. Perceptions of sound and noise are highly subjective from person to person. Table 4.10-1 lists several examples of the noise levels associated with common situations.

¹ j.c. brennan & associates, Inc. *Hat Ranch Environmental Noise Assessment*. February 18, 2021.

² Saxelby Acoustics LLC. *Hat Ranch Traffic Noise Review*. October 20, 2021.

³ City of Manteca. *Manteca General Plan 2023 Policy Document*. October 6, 2003.

⁴ City of Manteca. *City of Manteca General Plan 2023 Environmental Impact Report*. Certified October 6, 2003.



**Table 4.10-1
Typical Noise Levels**

Common Outdoor Activities	Noise Level (dBA)	Common Indoor Activities
	--110--	Rock Band
Jet Fly-over at 300 m (1,000 ft)	--100--	
Gas Lawn Mower at 1 m (3 ft)	--90--	
Diesel Truck at 15 m (50 ft), at 80 km/hr (50 mph)	--80--	Food Blender at 1 m (3 ft) Garbage Disposal at 1 m (3 ft)
Noisy Urban Area, Daytime Gas Lawn Mower, 30 m (100 ft)	--70--	Vacuum Cleaner at 3 m (10 ft)
Commercial Area Heavy Traffic at 90 m (300 ft)	--60--	Normal Speech at 1 m (3 ft)
Quiet Urban Daytime	--50--	Large Business Office Dishwasher in Next Room
Quiet Urban Nighttime	--40--	Theater, Large Conference Room (Background)
Quiet Suburban Nighttime	--30--	Library
Quiet Rural Nighttime	--20--	Bedroom at Night, Concert Hall (Background)
	--10--	Broadcast/Recording Studio
Lowest Threshold of Human Hearing	--0--	Lowest Threshold of Human Hearing

Source : j.c. brennan & associates, Inc., 2021.

Measuring sound directly in terms of pressure would require a very large and awkward range of numbers. To avoid this, the decibel scale was devised. The decibel scale uses the hearing threshold (20 micropascals), as a point of reference, defined as 0 decibels (dB). Other sound pressures are then compared to this reference pressure, and the logarithm is taken to keep the numbers in a practical range. The decibel scale allows a million-fold increase in pressure to be expressed as 120 dB, and changes in levels (dB) correspond closely to human perception of relative loudness.

The perceived loudness of sounds is dependent upon many factors, including sound pressure level and frequency content. However, within the usual range of environmental noise levels, perception of loudness is relatively predictable, and can be approximated by A-weighted sound levels. A strong correlation exists between A-weighted sound levels (expressed as dBA) and the way the human ear perceives sound. As such, the A-weighted sound level has become the standard tool of environmental noise assessment. All noise levels reported in this chapter are in terms of A-weighted levels, but are expressed as dB, unless otherwise noted.

The decibel scale is logarithmic, not linear. In other words, two sound levels 10 dB apart differ in acoustic energy by a factor of 10. When the standard logarithmic decibel is A-weighted, an increase of 10 dBA is generally perceived as a doubling in loudness. For example, a 70 dBA sound is half as loud as an 80 dBA sound, and twice as loud as a 60 dBA sound.

Several time-averaged scales represent noise environments and consequences of human activities. Community Noise Equivalent Level (CNEL), which can be used to compare the noise level of neighborhoods, is the weighted average noise level over time, presented in dB. Community noise is commonly described in terms of the ambient noise level, which is defined as the all-encompassing noise level associated with a given environment. A common statistical tool



to measure the ambient noise level is the average, or equivalent, sound level (L_{eq}), which corresponds to a steady-state A-weighted sound level containing the same total energy as a time varying signal over a given time period (usually one hour). The L_{eq} is the foundation of the composite noise descriptor, L_{dn} , and shows very good correlation with community response to noise.

The day/night average level (L_{dn}) is based upon the average noise level over a 24-hour day, with a +10 dB weighting applied to noise occurring during nighttime (10:00 PM to 7:00 AM) hours. The nighttime penalty is based upon the assumption that people react to nighttime noise exposures as though they were twice as loud as daytime exposures. Because L_{dn} represents a 24-hour average, short-term variations in the noise environment tend to be disguised.

Effects of Noise on People

The effects of noise on people can be placed in the following three categories:

- Subjective effects of annoyance, nuisance, and dissatisfaction;
- Interference with activities such as speech, sleep, and learning; or
- Physiological effects such as hearing loss or sudden startling.

Environmental noise typically produces effects in the first two categories. Workers in industrial plants can experience noise in the last category. A completely satisfactory way to measure the subjective effects of noise or the corresponding reactions of annoyance and dissatisfaction does not exist. A wide variation in individual thresholds of annoyance exists and different tolerances to noise tend to develop based on an individual's past experiences with noise. Thus, an important way of predicting a human reaction to a new noise environment is the way the new noise environment compares to the existing environment to which one has adapted: the so-called ambient noise level. In general, the more a new noise exceeds the previously existing ambient noise level, the less acceptable the new noise will be judged by noise sensitive receptors.

With regard to increases in A-weighted noise level, the following relationships occur:

- Except in carefully controlled laboratory experiments, a change of 1 dBA cannot be perceived;
- Outside of the laboratory, a 3 dBA change is considered a just-perceivable difference;
- A change in level of at least 5 dBA is required before any noticeable change in human response would be expected; and
- A 10 dBA change is subjectively heard as approximately a doubling in loudness, and can cause an adverse response.

Stationary point sources of noise – including stationary mobile sources such as idling vehicles – attenuate (lessen) at a rate of approximately 6 dB per doubling of distance from the source, depending on environmental conditions (i.e., atmospheric conditions and either vegetative or manufactured noise barriers, etc.). Widely distributed noises, such as a large industrial facility spread over many acres, or a street with moving vehicles, would typically attenuate at a lower rate.

Existing Conditions

The existing surrounding land uses, as well as the ambient noise levels and noise sources in the project area are discussed below.



Surrounding Land Uses and Sensitive Receptors

Currently, agricultural and residential land uses exist in the project vicinity. Agricultural uses in the vicinity include primarily almond orchards, berry farms, and vineyards located south and east of the site. Residential development in the surrounding area includes the Pillsbury Estates, Woodward Park, and Evans Estates communities, which are located to the north and the west of the project site.

Certain land uses are more sensitive to ambient noise levels than others due to the amount of noise exposure (in terms of both exposure time and shielding from noise sources) and the type of activities typically involved. Residences, motels and hotels, schools, libraries, churches, hospitals, nursing homes, auditoriums, parks, and outdoor recreation areas are generally more sensitive to noise than are commercial and industrial land uses, and, thus, are referred to as sensitive receptors. Sensitivity is a function of noise exposure (in terms of both exposure duration and insulation from noise) and the types of activities involved. The nearest existing sensitive land uses to the proposed project site would be the residences of Pillsbury Estates, Woodward Park, and Evans Estates. The sensitive receptors may be affected by increased project-related traffic noise and/or project-related noise from on-site activities.

Existing Ambient Noise Levels

To quantify the existing ambient noise environment in the project vicinity, short-term and continuous (24-hour) noise level measurements were conducted at the project site on August 25 and August 26, 2020. The noise measurement locations are shown in Figure 4.10-1, and the noise level measurement survey results are provided in Table 4.10-2.

The sound level meters were programmed to collect hourly noise level intervals at each site during the surveys. The maximum value (L_{max}) represents the highest noise level measured during an interval. The L_{eq} represents the energy average of all of the noise measured during an interval. The median value (L_{50}) represents the sound level exceeded 50 percent of the time during an interval.

Table 4.10-2 Summary of Existing Background Noise Measurement Data								
Site	Location	L _{dn}	Average Measured Hourly Noise Levels, dB					
			Daytime (7:00 AM-10:00 PM)			Nighttime (10:00 PM-7:00 AM)		
			L _{eq}	L ₅₀	L _{max}	L _{eq}	L ₅₀	L _{max}
Continuous (24-hour) Noise Level Measurements								
A	Northeast corner of site	55	49	45	66	49	45	62
Short-term Noise Level Measurements								
1	Northwest corner of site ¹	NA	56.9	52.5	66.2	N/A		
2	Southeast corner of site ²	NA	55.9	53	63.2	N/A		
¹ Measured at 11:30 AM ² Measured at 12:30 PM								
Source: j.c. brennan & associates, Inc., 2021.								



**Figure 4.10-1
Noise Measurement Sites**



Existing Roadway Noise Levels

To predict existing noise levels due to traffic, the Federal Highway Administration Highway Traffic Noise Prediction Model (FHWA RD-77-108) was used. The model is based upon the Calvenio reference noise emission factors for automobiles, medium trucks, and heavy trucks, with consideration given to vehicle volume, speed, roadway configuration, distance to the receiver, and the acoustical characteristics of the site. The FHWA model was developed to predict hourly L_{eq} values for free-flowing traffic conditions.

Traffic volumes for existing conditions were obtained from the traffic study prepared for the project by Fehr & Peers Transportation Consultants (see Appendix K of this EIR). Truck percentages and vehicle speeds on the local area roadways were estimated from field observations. Traffic noise levels are predicted at the sensitive receptors located at the closest typical setback distance along each project-area roadway segment. Where traffic noise barriers are predominately along a roadway segment, or outdoor activity areas are shielded by the building facades, a -5 dB offset was added to the noise prediction model. In some locations, sensitive receptors may be located at distances which vary from the assumed calculation distance and may experience shielding from intervening barriers or sound walls. However, the traffic noise analysis is believed to be representative of the majority of sensitive receptors located closest to the project-area roadway segments analyzed in this EIR, and, thus, provides a worst-case estimate.

The actual distances to noise level contours may vary from the distances predicted by the FHWA model due to roadway curvature, grade, shielding from local topography or structures, elevated roadways, or elevated receivers. Table 4.10-3 shows the existing traffic noise levels in terms of L_{dn} at the closest sensitive receptors along each roadway segment. As noted above, the distances reported in Table 4.10-3 are generally considered to be conservative estimates of noise exposure along the project-area roadways. The table also shows the distances to existing traffic noise contours. A complete listing of the FHWA model input data is included in Appendix H of this EIR.

Vibration

While vibration is similar to noise, both involving a source, a transmission path, and a receiver, vibration differs from noise because noise is generally considered to be pressure waves transmitted through air, whereas vibration usually consists of the excitation of a structure or surface. As with noise, vibration consists of an amplitude and frequency. A person's perception to the vibration depends on their individual sensitivity to vibration, as well as the amplitude and frequency of the source and the response of the system which is vibrating.

Vibration is measured in terms of acceleration, velocity, or displacement. A common practice is to monitor vibration levels in terms of peak particle velocities (PPV) in inches per second (in/sec). Standards pertaining to perception as well as damage to structures have been developed for vibration levels defined in terms of PPV. Human and structural response to different vibration levels is influenced by a number of factors, including ground type, distance between source and receptor, duration, and number of perceived vibration events. Table 4.10-4, below, which was developed by the California Department of Transportation (Caltrans), presents the typical effects of various vibration levels on people and buildings.



Table 4.10-3 Existing Traffic Noise Levels and Distances to Contours					
Roadway	Segment	Exterior Traffic Noise Level, dB L _{dn}	Distance to Traffic Noise Contours, L _{dn} (feet)		
			70 dB	65 dB	60 dB
Woodward Avenue	West of Main Street	57	10	21	44
Woodward Avenue	Main Street to Pillsbury Road	56	9	20	43
Woodward Avenue	Pillsbury Road to Atherton Drive	56	9	19	42
Woodward Avenue	Atherton Drive to Moffatt Boulevard	60	17	37	79
Main Street	Woodward Avenue to Future Antone Raymus Parkway	61	19	41	88
Main Street	Woodward Avenue to Atherton Drive	57	10	22	48
Main Street	Atherton Drive to State Route (SR) 120	62	22	47	101
Main Street	North of Mission Ridge Drive	59	13	28	61
Manteca Road	South of Future Antone Raymus Parkway	52	5	10	23
Pillsbury Road	Woodward Avenue to Heartland Drive	48	3	6	12
Pillsbury Road	Heartland Drive to Tannehill Drive	43	1	3	6
Pillsbury Road	Tannehill Drive to Future Antone Raymus Parkway	43	1	3	6
Atherton Road	North of Woodward Avenue	42	1	2	5
Atherton Road	Woodward Avenue to North Project Site	44	1	3	6
Atherton Road	North Project Site to Future Antone Raymus Parkway	N/A	-	-	-
Atherton Road	South of Future Antone Raymus Parkway	N/A	-	-	-
Moffatt Boulevard	North of Woodward Avenue	64	31	66	143
Moffatt Boulevard	South of Woodward Avenue	65	38	83	179
Note: Distances to traffic noise contours are measured in feet from the centerlines of the roadways.					
Source: j.c. brennan & associates, Inc., 2021.					



Table 4.10-4 Effects of Vibration on People and Buildings			
PPV		Human Reaction	Effect on Buildings
mm/sec	in/sec		
0.15 to 0.30	0.006 to 0.019	Threshold of perception; possibility of intrusion	Vibrations unlikely to cause damage of any type
2.0	0.08	Vibrations readily perceptible	Recommended upper level of the vibration to which ruins and ancient monuments should be subjected
2.5	0.10	Level at which continuous vibrations begin to annoy people	Virtually no risk of “architectural” damage to normal buildings
5.0	0.20	Vibrations annoying to people in buildings (this agrees with the levels established for people standing on bridges and subjected to relative short periods of vibrations)	Threshold at which there is a risk of “architectural” damage to normal dwelling - houses with plastered walls and ceilings. Special types of finish such as lining of walls, flexible ceiling treatment, etc., would minimize “architectural” damage
10 to 15	0.4 to 0.6	Vibrations considered unpleasant by people subjected to continuous vibrations and unacceptable to some people walking on bridges	Vibrations at a greater level than normally expected from traffic, but would cause “architectural” damage and possibly minor structural damage
<i>Source: Caltrans, TAV-02-01-R9601, 2002.</i>			

4.10.3 REGULATORY SETTING

Applicable federal laws or regulations pertaining to noise or vibration do not exist. The existing State and local laws and regulations related to noise and vibration applicable to the proposed project are listed below.

State Regulations

The following are the State environmental laws and policies relevant to noise.

California State Building Codes

The State Building Code, Title 24, Part 2 of the State of California Code of Regulations, establishes uniform minimum noise insulation performance standards to protect persons within new buildings which house people, including hotels, motels, dormitories, apartment houses, and dwellings other than single-family dwellings.

Title 24 mandates that interior noise levels attributable to exterior sources shall not exceed 45 dB L_{dn} or CNEL in any habitable room. Title 24 also mandates that for structures containing noise-sensitive uses to be located where the L_{dn} or CNEL exceeds 60 dB, an acoustical analysis must be prepared to identify mechanisms for limiting exterior noise to the prescribed allowable interior levels. If the interior allowable noise levels are met by requiring that windows be kept closed, the design for the structure must also specify a ventilation or air conditioning system to provide a habitable interior environment.

Local Regulations

The following are the local environmental goals and policies relevant to noise.



City of Manteca General Plan

The City of Manteca General Plan Noise Element contains goals, policies, and implementation measures for assessing noise impacts within the City. Listed below are the noise goals, policies, and implementation measures that are applicable to the proposed project:

- Goal N-1 Protect the residents of Manteca from the harmful and annoying effects of exposure to excessive noise.
- Goal N-3 Ensure that the downtown core noise levels remain acceptable and compatible with commercial and higher density residential land uses.
- Goal N-4 Protect public health and welfare by eliminating existing noise problems where feasible by establishing standards for acceptable indoor and outdoor noise, and by preventing significant increases in noise levels.
- Goal N-5 Incorporate noise considerations into land use planning decisions, and guide the location and design of transportation facilities to minimize the effects of noise on adjacent land uses.
- Policy N-P-2 New development of residential or other noise sensitive land uses will not be permitted in noise-impacted areas unless effective mitigation measures are incorporated into the project design to satisfy the performance standards in Table 9-1 (see Table 4.10-5).

Table 4.10-5 Maximum Allowable Noise Exposure from Mobile Noise Sources			
Land Use⁴	Outdoor Activity Areas¹ (L_{dn}/CNEL, dB)	Interior Spaces	
		L_{dn}/CNEL, dB	Leq, dB³
Residential	60 ²	45	-
Transient Lodging	60 ²	45	-
Hospitals, Nursing Homes	60 ²	45	-
Theaters, Auditoriums, Music Halls	-	-	35
Churches, Meeting Halls	60 ²	-	40
Office Buildings	65	-	45
Schools, Libraries, Museums	-	-	45
Playgrounds, Neighborhood Parks	70	-	-
¹ Outdoor activity areas for residential development are considered to be backyard patios or decks of single-family dwellings, and the patios or common areas where people generally congregate for multi-family developments. Outdoor activity areas for non-residential developments are considered to be those common areas where people generally congregate, including pedestrian plazas, seating areas, and outside lunch areas. Where the location of outdoor activity areas is unknown, the exterior noise level standard shall be applied to the property line of the receiving land use.			
² In areas where it is not possible to reduce exterior noise levels to 60 dB L _{dn} or below using a practical application of the best noise-reduction technology, an exterior noise level of up to 65 L _{dn} would be allowed.			
³ Determined for a typical worst-case hour during periods of use.			
⁴ Where a proposed use is not specifically listed on the table, the use shall comply with the noise exposure standards for the nearest similar use as determined by the City.			



Policy N-P-3 The City may permit the development of new noise-sensitive uses only where the noise level due to fixed (non-transportation) noise sources satisfies the noise level standards of Table 9-2 (see Table 4.10-6). Noise mitigation may be required to meet the Table 9-2 performance standards.

Table 4.10-6 Performance Standards for Stationary Noise Sources or Projects Affected By Stationary Noise Sources^{1,2}		
Noise Level Descriptor	Daytime (7:00 AM to 10:00 PM)	Nighttime (10:00 PM to 7:00 AM)
Hourly L_{eq} , dB	50	45
Maximum Level, dB	70	65
¹ Each of the noise levels specified above should be lowered by five (5) dB for simple noise tones, noises consisting primarily of speech or music, or for recurring impulsive noises. Such noises are generally considered by residents to be particularly annoying and are a primary source of noise complaints.		
² No standards have been included for interior noise levels. Standard construction practices should, with the exterior noise levels identified, result in acceptable interior noise levels.		

Policy N-P-5 In accord with the Table 9-2 (see Table 4.10-6), the City shall regulate construction-related noise to reduce impacts on adjacent uses.

Implementation N-I-1 New development in residential areas with an actual or projected exterior noise level of greater than 60 dB L_{dn} will be conditioned to use mitigation measures to reduce exterior noise levels to less than or equal to 60 dB L_{dn} .

Implementation N-I-3 In making a determination of impact under the California Environmental Quality Act (CEQA), a substantial increase will occur if ambient noise levels are increased by 10 dB or more. An increase from 5-10 dB may be substantial. Factors to be considered in determining the significance of increases from 5-10 dB include:

- The resulting noise levels;
- The duration and frequency of the noise;
- The number of people affected;
- The land use designation of the affected receptor sites;
- Public reactions or controversy as demonstrated at workshops or hearings, or by correspondence; and
- Prior CEQA determinations by other agencies specific to the project.

Implementation N-I-4 Control noise at the source through use of insulation, berms, building design and orientation, buffer space,



staggered operating hours and other techniques. Use noise barriers to attenuate noise to acceptable levels.

City of Manteca Municipal Code

Section 9.52.030, Prohibited noises – General standard, of the City of Manteca Municipal Code prohibits excessive or annoying noise or vibration to residential and commercial properties in the City. Section 9.52.030 of the Municipal Code states the following:

No person shall make, or cause to suffer, or permit to be made upon any public property, public right-of-way or private property, any unnecessary and unreasonable noises, sounds or vibrations which are physically annoying to reasonable persons of ordinary sensitivity or which are so harsh or so prolonged or unnatural or unusual in their use, time or place as to cause or contribute to the unnecessary and unreasonable discomfort of any persons within the neighborhood from which said noises emanate or which interfere with the peace and comfort of residents or their guests, or the operators or customers in places of business in the vicinity, or which may detrimentally or adversely affect such residences or places of business. (Ord. 1374 § 1, 2007)

Section 17.58.050, Noise Standards, of the City of Manteca Municipal Code establishes noise standards to ensure a high quality of life for all residents in the community. Specifically related to construction noise, Section 17.58.050(D)(8), Exempt Activities, states the following:

Construction activities when conducted as part of an approved Building Permit, except as prohibited in Subsection 17.58.050(E)(1) (Prohibited Activities) below.

Subsection 17.58.050(E)(1), Prohibited Activities, states the following:

Construction Noise. Operating or causing the operation of tools or equipment on private property used in alteration, construction, demolition, drilling, or repair work daily between the hours of 7:00 p.m. and 7:00 a.m., so that the sound creates a noise disturbance across a residential property line, except for emergency work of public service utilities.

4.10.4 IMPACTS AND MITIGATION MEASURES

The following section describes the standards of significance and methodology used to analyze and determine the proposed project's potential impacts related to noise and vibration. In addition, a discussion of the project's impacts, as well as mitigation measures where necessary, is also presented.

Impacts of the environment on a project (as opposed to impacts of a project on the environment) are beyond the scope of required California Environmental Quality Act (CEQA) review. "[T]he purpose of an EIR is to identify the significant effects of a project on the environment, not the significant effects of the environment on the project." (*Ballona Wetlands Land Trust v. City of Los Angeles*, (2011) 201 Cal.App.4th 455, 473 (*Ballona*)). The impacts discussed in this section of the EIR relate both to noise that may be caused by the proposed project (e.g. construction noise and operational traffic added to surrounding streets) as well as effects of existing environmental noise sources on future residents of the project (e.g. background traffic on surrounding streets). The California Supreme Court recently held that "CEQA does not generally require an agency to consider the effects of existing environmental conditions on a proposed project's future users or residents. What CEQA does mandate... is an analysis of how a project might exacerbate existing environmental hazards." (*California Building Industry Assn. v. Bay Area Air Quality Management*



Dist. (2015) 62 Cal.4th 369, 392; see also *Mission Bay Alliance v. Office of Community Investment & Infrastructure* (2016) 6 Cal.App.5th 160, 197 [“identifying the effects on the project and its users of locating the project in a particular environmental setting is neither consistent with CEQA’s legislative purpose nor required by the CEQA statutes”], quoting *Ballona, supra*, 201 Cal.App.4th at p. 474.) Therefore, for the purposes of the CEQA analysis, the relevant inquiry is not whether the proposed project’s future residents would be exposed to preexisting environmental noise-related hazards, but instead whether project-generated noise would exacerbate the pre-existing conditions. Nonetheless, for informational purposes, this chapter considers the proposed project’s contribution to the existing noise environment on both existing sensitive receptors and future residents of the proposed project.

Standards of Significance

Consistent with Appendix G of the CEQA Guidelines, a significant impact related to noise and vibration would occur if the proposed project would result in any of the following:

- Generation of a substantial temporary 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.
- Generation of a substantial permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies.
- Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels.

Per Appendix G of the CEQA Guidelines, projects within the vicinity of a public airport or private airstrip could expose people residing or working in the project area to excessive noise and vibration levels. The proposed project is not located within two miles of an airport. Therefore, aircraft noise or vibration would not impact the proposed project and such impacts are not examined further in this EIR.

Summary of Applicable Noise Standards

Applicable noise level standards related to noise and vibration are summarized below.

Applicable Non-Transportation Noise Standards

The Noise Element of the General Plan sets forth performance standards for non-transportation sources, as represented in Table 4.10-6. The proposed project would be required to comply with the noise standards presented therein. As such, noise generated by typical stationary noise sources shall not exceed 70 dBA L_{max} during daytime hours or 65 dBA L_{max} during nighttime hours. In addition, considering the nearest noise-sensitive receptors to the project site are single-family residential land uses, the proposed project must not generate noise that would exceed 65 dBA during daytime hours or 55 dBA during nighttime hours at the nearby residences.

Applicable Transportation Noise Standards

The proposed project would be subject to the Residential Land Use Maximum Allowable Noise Exposure from Mobile Noise Sources set forth in the Noise Element of the General Plan. As noted therein, and as shown in Table 4.10-5, the maximum transportation noise at the closest residences must be limited to 60 dB L_{dn} at outdoor activity spaces and 45 dB L_{dn} at indoor spaces.



Substantial Increase Criteria

Generally, a project may have a significant effect on the environment if the project will substantially increase the ambient noise levels for adjoining areas or expose people to measurably severe noise levels. In practice, a noise impact may be considered significant if the project would generate noise that would conflict with local project criteria or ordinances, or substantially increase noise levels at noise sensitive land uses.

Pursuant to Implementation Measure N-I-3 of the Manteca General Plan, a substantial increase would occur if ambient noise levels are increased by 10 dB or more. However, an increase from 5 to 10 dB may be considered substantial. Factors to be considered in determining the significance of increases from 5 to 10 dB include:

- The resulting noise levels;
- The duration and frequency of the noise;
- The number of people affected;
- The land use designation of the affected receptor sites;
- Public reactions or controversy as demonstrated at workshops or hearings, or by correspondence; and
- Prior CEQA determinations by other agencies specific to the project.

Vibration Standards

The City of Manteca does not have specific policies or standards pertaining to vibration levels. However, as shown in Table 4.10-4, above, for most people, a vibration-velocity level of 0.08 PPV in/sec is the approximate dividing line between barely perceptible and distinctly perceptible, and a vibration level of 0.10 PPV in/sec is the point at which continuous vibrations begin to annoy people. Architectural damage is known to occur at vibration levels of 0.20 PPV in/sec.

Method of Analysis

Below are descriptions of the methodologies used to measure background and ambient noise and estimate future traffic noise, construction noise, and vibration associated with the project. Further modeling details and calculations are provided in the Environmental Noise Assessment (see Appendix H of this EIR) and Traffic Noise Review (see Appendix I of this EIR). The results of the noise and vibration impact analyses were compared to the standards of significance discussed above in order to determine the associated level of impact.

Existing Ambient Noise Level Measurement Methodology

Larson Davis Laboratories (LDL) Model 820 precision integrating sound level meters were used for the ambient noise level measurement survey. The meters were calibrated before and after use with an LDL Model CAL200 acoustical calibrator to ensure the accuracy of the measurements. The equipment used meets all pertinent specifications of the American National Standards Institute for Type 1 sound level meters (ANSI S1.4).

Traffic Noise Impact Assessment Methodology

To describe future noise levels due to traffic, the FHWA RD-77-108 model was used. Direct inputs to the model included traffic volumes provided by Fehr & Peers Transportation Consultants for the Existing, Existing Plus Project, Cumulative, and Cumulative Plus Project scenarios. The FHWA model is based upon the Calvenio reference noise factors for automobiles, medium trucks and heavy trucks, with consideration given to vehicle volume, speed, roadway configuration, distance to the receiver, and the acoustical characteristics of the site. The FHWA model was



developed to predict hourly L_{eq} values for free-flowing traffic conditions. To predict $L_{dn}/CNEL$ values, a determination of the day/night distribution of traffic must be made, and the traffic volume input data must be adjusted to yield an equivalent hourly traffic volume. A complete listing of the FHWA Model input data is included in Appendix H of this EIR.

It should be noted that the traffic volumes provided by Fehr & Peers Transportation Consultants for the preparation of the Environmental Noise Assessment⁵ prepared by j.c. brennan & associates, Inc. for the proposed project have since been updated. As such, a Traffic Noise Review was prepared by Saxelby Acoustics,⁶ to address the updated traffic noise levels that would be generated by the proposed project. As discussed within the Traffic Noise Review, the updated traffic volumes under all scenarios were assessed, and Saxelby Acoustics concluded that the revised traffic volumes generated by the proposed project would not be substantial enough to change the conclusions of the Environmental Noise Assessment. Thus, the original noise analysis prepared by j.c. brennan & associates, Inc. was considered conservative, and the data from the Environmental Noise Assessment is used for the analysis within this chapter and presented herein.

As discussed above, impacts of the environment on a project (as opposed to impacts of a project on the environment) are beyond the scope of required CEQA review. Nonetheless, for informational purposes, the proposed project's contribution to the existing noise environment on both existing sensitive receptors and future residents of the proposed project is discussed below in order to demonstrate compliance with applicable City noise level standards. The Cumulative Plus Project scenario is used as the worst-case scenario to determine the appropriate noise level attenuation necessary to ensure compliance with the City's noise level standards. The analysis includes estimated traffic noise levels at the nearest future residents with the inclusion of a six-, seven-, and eight-foot-tall noise barrier at the property line for informational purposes. The modeled noise barriers assume flat site conditions, where roadway elevations, base of wall elevations, and building pad elevations are approximately equivalent.

Construction Noise and Vibration Impact Methodology

Construction noise and vibration was analyzed using data compiled for various pieces of construction equipment at a representative distance of 50 feet. Construction activities are discussed relative to the applicable City of Manteca noise policies.

Project-Specific Impacts and Mitigation Measures

The following discussion of impacts is based on implementation of the proposed project in comparison with the baseline and standards of significance identified above.

4.10-1 Generation of a substantial temporary 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. Based on the analysis below, and with the implementation of mitigation, the impact is less than significant.

⁵ j.c. brennan & associates, Inc. *Hat Ranch Environmental Noise Assessment*. February 18, 2021.

⁶ Saxelby Acoustics LLC. *Hat Ranch Traffic Noise Review*. October 20, 2021.



During the construction of the proposed project, including the placement of roads, water and sewer lines, and related infrastructure, noise from construction activities would add to the noise environment in the project vicinity. Table 4.10-7 shows maximum noise levels (L_{max}) associated with typical construction equipment. Based on the table, activities involved in typical construction would generate maximum noise levels ranging from 76 dB to 90 dB at a distance of 50 feet. Noise would also be generated during the construction phase by increased truck traffic on area roadways.

Table 4.10-7 Construction Equipment Noise	
Type of Equipment	Maximum Level, dB at 50 feet
Backhoe	78
Compactor	83
Compressor (air)	78
Concrete Saw	90
Dozer	82
Dump Truck	76
Excavator	81
Generator	81
Jackhammer	89
Pneumatic Tools	85
<i>Source: Federal Highway Administration, Roadway Construction Noise Model User's Guide, January 2006.</i>	

Noise would be generated from truck traffic associated with the transport of heavy materials and equipment to and from construction sites. However, construction traffic would be expected to access the project site from SR 120 by proceeding south along Main Street, a Caltrans-designated California Legal Route for haul trucks. From Main Street, haul trucks would proceed east to the project site along the proposed Antone Raymus Parkway. A staging area for construction vehicles and equipment would be established within the southern portion of the project site. In addition, construction activities, including construction traffic, for the proposed project would be temporary in nature and are anticipated to occur during normal daytime working hours, as regulated by the City of Manteca. As discussed in further detail below, traffic noise levels generated by the proposed project would be less-than-significant. Therefore, given the relatively small amount of truck trips generated by project construction as compared to trips generated by project operations, a reasonable assumption can be made that a significant increase in noise associated with project-generated construction truck traffic would not occur.

Furthermore, according to Section 17.58.050 of the City's Municipal Code, construction activities are exempt from noise regulation during the hours of 7:00 AM to 7:00 PM. Accordingly, all noise-generating activities at the construction site or in areas adjacent to the construction site associated with the proposed project would occur only during the exempt hours set forth in the City of Manteca Municipal Code. In addition, the project contractor would ensure that all equipment used in the construction of the project would be fitted with factory-equipped mufflers and in good working order, which would further reduce construction noise levels. Finally, construction-related noise would only occur within areas of the project site in which construction activities are taking place. Due to spherical spreading loss, as one increases the distance between equipment, or increases separation of areas with



simultaneous construction activity, dispersion and distance attenuation reduce the effects of combining separate noise sources. The noise levels from a source would decrease at a rate of approximately 6.0 dB per every doubling of distance from the noise source. As such, because construction activities would not occur immediately adjacent to sensitive receptors throughout the duration of project construction, noise levels from such activities experienced by nearby residences would be less than the levels presented in Table 4.10-7 for a portion of project construction.

Based on the above, through compliance with the Manteca Municipal Code, adherence to legal truck routes, and incorporation of industry-standard noise reduction measures, the proposed project would not result in the generation of a substantial temporary increase in ambient noise levels in the project vicinity in excess of standards established by the City of Manteca. However, enforcement of time restrictions specified in the City's Municipal Code, a specified haul truck route, and the use of noise-dampening equipment would be required to ensure that the temporary or periodic increase in ambient noise levels in the project vicinity associated with construction of the proposed project would not be considered substantial. Otherwise, a **potentially significant** impact could occur related to construction noise.

Mitigation Measure(s)

Implementation of the following mitigation measures would reduce the above potential impact.

- 4.10-1(a) *Noise-generating construction activities associated with the proposed project shall only occur within the hours identified in City of Manteca Municipal Code Section 17.58.050. The above language shall be included on final project improvement plans, grading plans and building plans prior to approval by the City of Manteca Community Development Department.*
- 4.10-1(b) *To the maximum extent practical, as determined by the City of Manteca Community Development Department, the following measures shall be implemented during project construction:*
- *All noise-producing project equipment and vehicles using internal-combustion engines shall be equipped with manufacturers-recommended mufflers and be maintained in good working condition;*
 - *All mobile or fixed noise-producing equipment used on the project site that are regulated for noise output by a federal, State, or local agency shall comply with such regulations while in the course of project construction;*
 - *Electrically powered equipment shall be used instead of pneumatic or internal-combustion-powered equipment, where feasible;*
 - *Material stockpiles and mobile equipment staging, parking, and maintenance areas shall be located as far as practicable from noise-sensitive receptors;*
 - *Material stockpiles and construction equipment and vehicles shall be staged on-site along the site's southern property line;*



- *Haul trucks shall access the project site from State Route (SR) 120 by way of Main Street;*
- *Project area and site access road speed limits shall be established and enforced during the construction period; and*
- *Nearby residences shall be notified of construction schedules so that arrangements can be made, if desired, to limit their exposure to short-term increases in ambient noise levels.*

The above requirements shall be included via notation on project grading plans, subject to review and approval by the City of Manteca Community Development Department.

Level of Significance Following Mitigation

Implementation of Mitigation Measures 4.10-1(a) and 4.10-1(b) would ensure that project construction activities adhere to the hours set forth in Manteca Municipal Code Section 17.58.050 and incorporated measures to reduce noise generated by construction activities at sensitive receptors, to the maximum extent feasible. Therefore, implementation of Mitigation Measures 4.10-1(a) and 4.10-1(b) would reduce the project's potential to generate a substantial temporary increase in ambient noise levels in the vicinity of the project in excess of applicable standards to a *less-than-significant* level.

4.10-2 Generation of a substantial permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies. Based on the analysis below and with implementation of mitigation, the impact is *less than significant*.

The primary noise sources associated with the proposed project would be traffic noise from the increased traffic volumes on the local roadway network, and noise from the proposed on-site public park areas. Both noise sources are discussed below with respect to future noise levels at existing noise-sensitive receptors in the project vicinity, and at the proposed residences.

Transportation Noise at Existing Sensitive Receptors

Traffic generated by the proposed project could generate traffic noise increases exceeding the City's substantial increase criteria of 5 to 10 dB, as outlined above. Table 4.10-8 shows the predicted traffic noise level increases on the local roadway network for Existing and Existing Plus Project conditions.

Under the Existing and Existing Plus Project conditions, some noise sensitive receptors located along the project-area roadways are currently exposed to exterior traffic noise levels exceeding the City of Manteca 60 dB L_{dn} exterior noise level standard for residential uses, and would continue to experience elevated exterior noise levels with implementation of the proposed project, as shown in Table 4.10-8.



Where existing residences are currently subjected to noise levels that exceed the 60 dB L_{dn} standard, the project would not result in an increase in traffic noise levels of more than 2 dB, which is below the City's applicable substantial increase criteria of 5 to 10 dB. In addition, where the proposed project would increase noise levels in excess of the applicable substantial increase criteria, the noise levels at such locations would not be increased to levels in excess of the City's 60 dB L_{dn} standard. Although the Antone Raymus Parkway would be constructed along with the proposed project, the Antone Raymus Parkway is anticipated in the General Plan.

Based on the above, the proposed project would not expose existing noise-sensitive receptors to transportation noise levels that exceed the City of Manteca's noise level standards.

Noise Levels at the Proposed Residences

Although CEQA does not require an EIR to evaluate noise impacts of the existing environment on a project, the future traffic and park noise increases could result in noise levels at the proposed residences that would exceed the City of Manteca noise level criteria. Therefore, for informational purposes, and to consider consistency with the City's noise level standards, noise levels at the future residents of the proposed project are discussed below.

Exterior Traffic Noise

The project site is located adjacent to Pillsbury Road, which travels through the center of the site, the future Antone Raymus Parkway to the south, and the future extension of Atherton Drive along the eastern edge of the project to future Antone Raymus Parkway.

The FHWA traffic noise prediction model was used to predict Cumulative Plus Project traffic noise levels at the proposed residential land uses. As discussed above, the Cumulative Plus Project scenario was used as the worst-case scenario in order to determine the appropriate noise level attenuation necessary to ensure compliance with the City's noise level standards. Table 4.10-9 shows the predicted traffic noise levels at the proposed residential uses adjacent to the major project-area arterial roadways, including the traffic noise levels with the inclusion of a noise attenuation barrier.

As shown in the table, the future project residents would not be subjected to traffic noise levels in excess of the City's exterior noise level standard of 60 dB L_{dn} due to traffic along Atherton Drive or Pillsbury Road, even under Cumulative Plus Project conditions. However, without inclusion of a noise attenuation barrier, the future residents proposed along Antone Raymus Parkway could be subjected to noise levels in excess of the City's 60 dB L_{dn} standard. As such, a significant impact could occur.



**Table 4.10-8
Existing and Existing Plus Project Traffic Noise Levels**

Roadway	Segment	Noise Levels (L _{dn} , dB) at Nearest Sensitive Receptors			Distance to Existing + Project Traffic Noise Contours (feet) ¹		
		Existing	Existing + Project	Change	70 dB L _{dn}	65 dB L _{dn}	60 dB L _{dn}
Woodward Avenue	West of Main Street	57	57	0	10	22	47
Woodward Avenue	Main Street to Pillsbury Road	56	59	+3	14	31	67
Woodward Avenue	Pillsbury Road to Atherton Drive	56	58	+2	12	26	56
Woodward Avenue	Atherton Drive to Moffat Boulevard	60	61	+1	20	43	94
Main Street	Woodward Avenue to Future Antone Raymus Parkway	61	62	+1	21	45	97
Main Street	Woodward Avenue to Atherton Drive	57	59	+2	14	30	65
Main Street	Atherton Drive to SR 120	62	64	+2	30	64	137
Main Street	SR 120 to Mission Ridge Drive	65	65	0	35	76	163
Main Street	North of Mission Ridge Drive	59	59	0	13	29	63
Manteca Road	South of Future Antone Raymus Parkway	52	52	0	5	11	23
Pillsbury Road	Woodward Avenue to Heartland Drive	48	53	+5	6	13	27
Pillsbury Road	Heartland Drive to Tannehill Drive	43	52	+9	5	11	24
Pillsbury Road	Tannehill Drive to Future Antone Raymus Parkway	48	57	+9	5	11	24
Pillsbury Road	South of Antone Raymus Parkway	NA	46	+46	2	4	9

(Continues on next page)



**Table 4.10-8
Existing and Existing Plus Project Traffic Noise Levels**

Roadway	Segment	Noise Levels (L _{dn} , dB) at Nearest Sensitive Receptors			Distance to Existing + Project Traffic Noise Contours (feet) ¹		
		Existing	Existing + Project	Change	70 dB L _{dn}	65 dB L _{dn}	60 dB L _{dn}
Atherton Road	North of Woodward Avenue	42	43	+1	1	2	5
Atherton Road	Woodward Avenue to North Project Site	44	50	+6	3	8	16
Atherton Road	North Project Site to Future Antone Raymus Parkway	NA	50	+50	3	7	15
Atherton Road	South of Future Antone Raymus Parkway	NA	41	+41	1	2	4
Moffatt Boulevard	North of Woodward Avenue	64	64	0	31	67	145
Moffatt Boulevard	South of Woodward Avenue	65	66	+1	40	87	188
Antone Raymus Parkway	Manteca Road to Project Driveway West	N/A	N/A	--	--	--	--
Antone Raymus Parkway	Project Driveway West to Pillsbury Road	N/A	55	+55	7	16	35
Antone Raymus Parkway	Pillsbury Road to Atherton Drive	N/A	52	+52	4	9	20
Antone Raymus Parkway	Atherton Drive to Austin Road	N/A	53	+53	5	12	25

¹ Distances to traffic noise contours are measured in feet from the centerlines of the roadways.

² Traffic noise levels do not account for shielding from existing noise barriers or intervening structures. Traffic noise levels may vary depending on actual setback distances and localized shielding.

³ **Bolded text** indicates a traffic noise level increase in excess of the City's substantial increase criteria of 5-10 dB.

Source: j.c. brennan & associates, Inc., 2021.



**Table 4.10-9
Cumulative Plus Project Transportation Noise Levels at
Proposed Residential Uses**

Roadway	Receptor Description	Approximate Residential Setback, feet ¹	Noise Level, dB	Predicted Traffic Noise Levels, dB L _{dn} ²			
				No Wall	6' Wall	7' Wall	8' Wall
Antone Raymus Parkway	First Floor Backyard	75	65	65	60	None Required	
Atherton Drive	First Floor Backyard	75	54	54	None Required		
Pillsbury Road	First Floor Backyard	75	60	60	None Required		

¹ Setback distances are measured in feet from the centerlines of the roadways to the center of residential backyards.

² The modeled noise barriers assume flat site conditions where roadway elevations, base of wall elevations, and building pad elevations are approximately equivalent.

Source: j.c. brennan & associates, Inc., 2021.

Interior Traffic Noise

Modern construction typically provides a 25 dB exterior-to-interior noise level reduction with windows closed. Therefore, sensitive receptors exposed to exterior noise of 70 dB L_{dn}, or less, would typically comply with the City of Manteca 45 dB L_{dn} interior noise level standard. Additional noise reduction measures, such as acoustically-rated windows are generally required for exterior noise levels exceeding 70 dB L_{dn}. As shown in Table 4.10-9, the maximum exterior traffic noise level at the future project residences, without taking into consideration any inclusion of a sound wall, is estimated to be 65 dB L_{dn}. As such, based on a 25 dB exterior-to-interior noise level reduction, the maximum interior noise level that would be experienced at a future residence would be approximately 40 dB L_{dn}, which would comply with the City's interior noise level standard of 45 dB L_{dn}. In addition, the proposed project would be conditioned by the City to require mechanical ventilation be provided in each of the proposed residences to allow residents to keep doors and windows closed, as desired, for additional acoustical isolation. Therefore, the proposed project would not expose new noise-sensitive uses to transportation noise levels that exceed City of Manteca interior noise level standards.

School, Park, and Recreational Activity Noise

As mentioned previously, CEQA does not require an EIR to evaluate noise impacts of the existing environment on a project or the project's impacts on itself. Nonetheless, noise levels associated with the proposed school and parks at the future project residences have been included herein for informational purposes and to consider consistency with the City's noise level standards. Children playing on playgrounds and at neighborhood parks or outdoor recreational fields (e.g., softball, soccer, basketball, tennis, etc.) are often considered potentially significant noise sources which could adversely affect adjacent noise-sensitive land uses. Typical noise levels associated with groups of approximately 50 children playing at a distance of 50 feet generally



range from 55 to 60 dB L_{eq} and 70 to 75 dB L_{max} . School playground and park activities primarily occur during daytime hours. Therefore, noise levels associated with the proposed playgrounds would need to comply with the City of Manteca exterior noise level standards for stationary noise sources of 50 dB L_{eq} and 70 dB L_{max} at the nearest residential uses.

Per the Environmental Noise Assessment, the 50 dB L_{eq} noise contour would be located approximately 160 feet from the center of playgrounds or recreational fields. The 70 dB L_{max} noise contour would extend approximately 90 feet from the center of playground or recreational fields. For residential backyards located less than 160 feet from the center of a playground or recreational field, noise levels would be expected to exceed the City of Manteca 50 dB L_{eq} exterior noise level standard. However, the Environmental Noise Assessment concluded that if school playground or park areas are separated from residential uses by local roadways, noise attenuation measures would not be considered necessary. All proposed residences of the project would be separated by the proposed school and park areas by local roadways. Therefore, the proposed project would not expose new noise-sensitive uses to school, park, and recreational activity noise levels that would exceed City of Manteca exterior or interior noise level standards.

Conclusion

Based on the above, with construction of a sound wall along the proposed Antone Raymus Parkway, the proposed project would not expose existing or new noise-sensitive uses to noise levels in excess of applicable City of Manteca noise level standards. However, absent the construction of such noise-attenuating feature, the proposed project could have a **potentially significant** impact related to the generation of a substantial permanent increase in ambient noise levels.

Mitigation Measure(s)

Implementation of the following mitigation measures would reduce the above potential impact.

- 4.10-2 *Prior to the approval of improvement plans, the improvement plans shall show a six-foot-tall traffic noise barrier, which shall be subject to review and approval by the City of Manteca Community Development Department, which would ensure traffic noise levels from the road are reduced to the normally acceptable 60 dB L_{dn} standard at the first-floor backyard of residences along Antone Raymus Parkway. The noise barriers shall take the form of a masonry wall, earthen berm, or combination of the two. Other materials may be acceptable, and shall be reviewed by an acoustical consultant, prior to approval and construction.*

Level of Significance Following Mitigation

Implementation of Mitigation Measures 4.10-2 would ensure that transportation noise levels at the proposed residential uses do not exceed the applicable 60 dB L_{dn} standard at the first-floor backyard of residences along Antone Raymus Parkway. Therefore, implementation of Mitigation Measures 4.10-2 would reduce the project's



potential to generate a substantial permanent increase in ambient noise levels in the vicinity of the project in excess of applicable standards to a *less-than-significant* level.

4.10-3 Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels. Based on the analysis below, the impact is *less than significant*.

Vibration would not occur as a result of project operations; rather, vibration-generating activities associated with the proposed project would only occur during construction activities such as grading and utility placement.

Construction vibration impacts include human annoyance and building structural damage. Human annoyance occurs when construction vibration rises significantly above the threshold of perception. Building damage can take the form of cosmetic or structural. Table 4.10-10 below shows the typical vibration levels produced by construction equipment.

Table 4.10-10		
Vibration Levels for Various Construction Equipment		
Type of Equipment	PPV at 25 feet (in/sec)	PPV at 50 feet (in/sec)
Large Bulldozer	0.089	0.031
Loaded Trucks	0.076	0.027
Small Bulldozer	0.003	0.001
Auger/drill Rigs	0.089	0.031
Jackhammer	0.035	0.012
Vibratory Hammer	0.070	0.025
Vibratory Compactor/Roller	0.210	0.074
<i>Source: Federal Transit Administration, Transit Noise and Vibration Impact Assessment Guidelines, May 2006.</i>		

Sensitive receptors in the vicinity of the project site could be impacted by construction-related vibrations, especially vibratory compactors/rollers. The nearest receptors are located approximately 50 feet or further from any areas of the project site that might require grading or paving. As shown in Table 4.10-10, at a distance of 50 feet or further, construction vibrations are not predicted to exceed the 0.2 in/sec PPV threshold of damage to buildings or the 0.1 in/sec threshold of annoyance criteria. Therefore, construction vibrations associated with the proposed project would not cause damage to existing buildings or cause annoyance to any nearby existing sensitive receptors. Additionally, construction activities would be temporary in nature and would occur during normal daytime working hours in accordance with Section 17.58.050(E)(1) and Section 9.52.040 of the City's Municipal Code.

Based on the construction equipment to be used, and the distance from construction activities to the nearest structures, vibration from the proposed project would not be a concern. Additionally, construction activities would be temporary in nature. Therefore, the proposed project would not result in the generation of excessive groundborne vibration or groundborne noise levels, and a *less-than-significant* impact would occur.



Mitigation Measure(s)

None required.

Cumulative Impacts and Mitigation Measures

As defined in Section 15355 of the CEQA Guidelines, “cumulative impacts” refers to two or more individual effects which, when considered together, are considerable, compound, or increase other environmental impacts. The individual effects may be changes resulting from a single project or a number of separate projects. The cumulative impact from several projects is the change in the environment that results from the incremental impact of the project when added to other closely related past, present, and reasonably foreseeable probable future projects. For further detail related to the cumulative setting of the proposed project, refer to Chapter 6, Statutorily Required Sections, of this EIR.

4.10-4 Generation of a substantial permanent increase in ambient noise levels associated with cumulative development of the proposed project in combination with future buildout of the General Plan. Based on the analysis below, the cumulative impact is *less than significant*.

The proposed project in conjunction with cumulative development associated with buildout of the City of Manteca General Plan would result in increased vehicle traffic along local roadways relative to existing conditions. Such increases in vehicle traffic would result in increased traffic noise levels throughout the City’s Planning Area, which would incrementally affect the future cumulative ambient noise environment, potentially resulting in new conflicts with the City’s 60 dB L_{dn}/CNEL exterior noise level threshold. As part of the Environmental Noise Assessment, noise levels due to traffic increases on the local roadway network were evaluated for Cumulative and Cumulative Plus Project Conditions. The resulting traffic noise levels at the nearest sensitive receptors are summarized in Table 4.10-11.

As shown in Table 4.10-11, under Cumulative and Cumulative Plus Project conditions, some noise sensitive receptors located along the project-area roadways are currently exposed to exterior traffic noise levels exceeding the City of Manteca 60 dB L_{dn} exterior noise level standard for residential uses, and would continue to experience elevated exterior noise levels with implementation of the proposed project, as shown in Table 4.10-11. However, the proposed project would result in a maximum increase in traffic noise levels of 5 dB, which would be below the City’s applicable substantial increase criteria of 5 to 10 dB. Therefore, the proposed project would not generate a substantial permanent increase in ambient noise levels in excess of applicable standards under Cumulative Plus Project conditions.

In addition, as discussed above, the future project residents would not be subjected to traffic noise levels in excess of the City’s exterior noise level standard of 60 dB L_{dn} due to traffic along Atherton Drive or Pillsbury Road under Cumulative Plus Project conditions. However, without inclusion of a noise attenuation barrier, the future residents proposed along Antone Raymus Parkway could be subjected to noise levels in excess of the City’s 60 dB L_{dn} standard.



Table 4.10-11
Cumulative and Cumulative Plus Project Traffic Noise Levels

Roadway	Segment	Noise Levels (L _{dn} , dB) at Nearest Sensitive Receptors			Distance to Cumulative + Project Traffic Noise Contours (feet) ¹		
		Cumulative	Cumulative + Project	Change	70 dB L _{dn}	65 dB L _{dn}	60 dB L _{dn}
Woodward Avenue	West of Main Street	58	58	0	12	25	55
Woodward Avenue	Main Street to Pillsbury Road	60	61	+1	19	42	90
Woodward Avenue	Pillsbury Road to Atherton Drive	60	61	+1	19	40	87
Woodward Avenue	Atherton Drive to Moffat Boulevard	65	66	+1	39	84	180
Main Street	Woodward Ave to Future Antone Raymus Parkway	65	66	+1	38	82	177
Main Street	Woodward Avenue to Atherton Drive	61	62	+1	22	47	101
Main Street	Atherton Drive to SR 120	66	67	+1	47	100	216
Main Street	SR 120 to Mission Ridge Drive	67	67	0	45	96	208
Main Street	North of Mission Ridge Drive	60	60	0	17	37	79
Manteca Road	South of Future Antone Raymus Parkway	53	53	0	5	11	24
Pillsbury Road	Woodward Avenue to Heartland Drive	55	57	+2	10	21	45
Pillsbury Road	Heartland Drive to Tannehill Drive	51	54	+3	7	15	32
Pillsbury Road	Tannehill Drive to Future Antone Raymus Parkway	55	60	+5	6	14	29
Pillsbury Road	South of Antone Raymus Parkway	50	52	+2	4	10	21
Atherton Road	North of Woodward Avenue	50	50	0	4	8	17

(Continues on next page)



**Table 4.10-11
Cumulative and Cumulative Plus Project Traffic Noise Levels**

Roadway	Segment	Noise Levels (L _{dn} , dB) at Nearest Sensitive Receptors			Distance to Cumulative + Project Traffic Noise Contours (feet) ¹		
		Cumulative	Cumulative + Project	Change	70 dB L _{dn}	65 dB L _{dn}	60 dB L _{dn}
Atherton Road	Woodward Avenue to North Project Site	56	57	+1	10	22	48
Atherton Road	North Project Site to Future Antone Raymus Parkway	51	54	+3	6	13	28
Atherton Road	South of Future Antone Raymus Parkway	50	51	+1	4	8	18
Moffatt Boulevard	North of Woodward Avenue	65	65	0	35	76	163
Moffatt Boulevard	South of Woodward Avenue	68	69	+1	60	129	279
Antone Raymas Parkway	Manteca Road to Project Driveway West	65	65	0	33	70	152
Antone Raymus Parkway	Project Driveway West to Pillsbury Road	58	60	+2	16	34	73
Antone Raymus Parkway	Pillsbury Road to Atherton Drive	59	60	+1	16	33	72
Antone Raymus Parkway	Atherton Drive to Austin Road	59	60	+1	16	35	75

¹ Distances to traffic noise contours are measured in feet from the centerlines of the roadways.

² Traffic noise levels do not account for shielding from existing noise barriers or intervening structures. Traffic noise levels may vary depending on actual setback distances and localized shielding.

Source: j.c. brennan & associates, Inc., 2021.



In order to ensure compliance with the City's noise level standards, the City would condition the proposed project to include a six-foot tall noise barrier. With the required condition of approval, traffic noise at the proposed residences under Cumulative Plus Project conditions would not conflict with the City's applicable noise standards.

Therefore, the proposed project's incremental contribution to the cumulative noise environment would be considered ***less than significant***.

Mitigation Measure(s)

None required



4.11 PUBLIC SERVICES, RECREATION, UTILITIES, AND SERVICE SYSTEMS

4.11 PUBLIC SERVICES, RECREATION, UTILITIES, AND SERVICE SYSTEMS

4.11.1 INTRODUCTION

The Public Services, Recreation, Utilities, and Service Systems chapter of the EIR summarizes the existing setting related to public services, recreation, and utilities and identifies potential new demands resulting from the proposed project on fire and police protection services, parks, water supply, sewer, storm drainage, and gas and electric infrastructure. Information for this section was drawn primarily from the City of Manteca General Plan,¹ the City of Manteca General Plan EIR,² the San Joaquin County Local Agency Formation Commission's (LAFCo) Change of Organization Policies and Procedures,³ the Ripon Unified School District Facilities Assessment and Implementation Plan,⁴ and a Water Supply Assessment (WSA) prepared for the proposed project by West Yost (see Appendix J of this EIR).⁵

In response to the Notice of Preparation (NOP), the City received comments related to public services, recreation, utilities, and service systems regarding the if adequate law enforcement, fire protection, wastewater, water, and storm drainage services are available to serve the proposed project, as well as if adequate fire flow exists to serve the project. The comments have been carefully reviewed and considered by the City of Manteca and are reflected in the analysis of impacts in this chapter.

4.11.2 EXISTING ENVIRONMENTAL SETTING

The following section describes the existing public services that would serve the proposed project, including fire and police protection services, schools, parks and other public facilities in the area. In addition, the section details existing utilities, including water supply; wastewater conveyance and treatment; stormwater drainage; gas, electric, and telecommunications infrastructure; and solid waste collection services.

Fire Protection and Emergency Medical Services

The Hat Ranch Project (proposed project) consists of three parcels. For the purposes of this environmental analysis, the term "West Parcel" refers to the parcels to be developed to the west of Pillsbury Road, and the term "East Parcel" refers to the parcel to be developed to the east of Pillsbury Road. Currently, the project site's West Parcel is served by the Lathrop-Manteca Fire District. The East Parcel is served by the Ripon Consolidated Fire District. As part of annexation of the project site into the City limits, the proposed project would include detachment from the Lathrop-Manteca Fire District and Ripon Consolidated Fire District, requiring approval by San Joaquin County LAFCo. The Manteca Fire Department (MFD) would assume responsibility for providing fire protection and emergency medical services for the project site.

¹ City of Manteca. *Manteca General Plan 2023 Policy Document*. October 6, 2003.

² City of Manteca. *City of Manteca General Plan 2023 Environmental Impact Report*. Certified October 6, 2003.

³ San Joaquin County Local Agency Formation Commission. *Change of Organization Policies and Procedures*. Available at: <https://www.sjgov.org/commission/laftco/policies>. Accessed December 2020.

⁴ Ripon Unified School District. *Facilities Assessment and Implementation Plan*. Available at: <https://www.riponusd.net/ripon-usd-facilities-master-plan>. Accessed June 2021.

⁵ West Yost. *Hat Ranch Water Supply Assessment*. November 2021.



The MFD provides fire protection and emergency medical response services in the City, serving approximately 72,880 residents throughout approximately 17 square miles within the City limits and operating out of five fire stations. Headquarters are located at Station 242 (1154 South Union Road), which also houses the department's Fire Prevention Bureau. The MFD maintains a goal for the initial company of three firefighters to arrive on-scene for fire and emergency medical service incidents within five minutes, 90 percent of the time, from the time MFD receives the call from the dispatch center to the time of arrival.

The primary station that would serve the project site is Station 245, which initiated operations in June 2020 and is located at the northwest corner of Woodward Avenue and Atherton Drive, approximately 0.7-mile north of the project site.

Organization and Staffing

The MFD is organized into three divisions: Administration, Operations, and the Fire Prevention Bureau. The following provides a more in-depth discussion of each division:

Administration Division

The Administration Division is responsible for the day-to-day administration of MFD activities and regulations, including budget preparation and control, purchasing, personnel management, employee health and safety, record keeping, facilities management, information and press releases, and clerical management. Administration provides for and manages several MFD functions, including department-wide training, cost-recovery, grant writing, and maximizing the department's volunteer programs. The Administration Division includes the Office of the Fire Chief, Support Services, Volunteer Programs, and Professional Standards/Training.

Operations Division

The Operations Division is responsible for MFD's most traditional elements, which involves managing the department's emergency response component and associated resources. The division provides 24-hour emergency response to a variety of emergencies, including, but not limited to, fires, medical emergencies, vehicle accidents, hazardous materials incidents, and public assistance. Personnel resources include 39 full-time firefighters as well as reserve firefighters. Other resources essential to MFD's emergency response abilities include vehicles and equipment, communications and dispatch, and other support functions such as hazard abatement, pre-fire planning, and public education. When not engaged in emergency response, Operations personnel provide logistical support in the areas of facility preservation, communication equipment maintenance, and apparatus upkeep and repair. The following provides further information on the components of MFD's Operations Division:

Fire Suppression Personnel

Fire Suppression Personnel respond to emergency incidents. Staffing includes three shift commanders, 12 fire captains, 12 fire engineers, and 12 firefighters. Personnel also assist with fire prevention and logistical support when not engaged in emergency response.

Dispatch and Communication

Through a contract with the City of Stockton, MFD is dispatched by Stockton's Regional Fire Dispatch Center. Dispatch and Communication also encompasses MFD's communications infrastructure, such as radio towers, microwave systems, base stations, data lines, and comparators, as well as other equipment, including 26 mobile radios, 75 portable radios, maintenance, and associated agreements.



Emergency Response Vehicles and Equipment

MFD's vehicles and equipment include eight fire engines, an aerial ladder truck, a rescue unit, 12 automobiles/pickups, two volunteer vehicles, and four support trailers. All associated equipment falls under this program, including fire hoses, nozzles, power tools, Jaws of Life, thermal imagers, and hand tools. Additionally, annual certification testing in this program is required for all department ladders (ground and aerial) as well as hydraulic tools such as the Jaws of Life.

Reserve Firefighters

Operations consists of 20 reserve firefighters. Reserves serve MFD and the community during larger emergency incidents, such as structure fires. Reserves Firefighters assist MFD's ability to provide customer service to citizens during emergencies.

Fire Investigation

MFD's fire investigators determine the cause and origin of every fire to determine damages and responsibility for the incident. While most fires are attributed to accidents, fire investigators must always determine if arson was committed.

Fire Prevention Bureau Division

The Fire Prevention Bureau (Bureau) administers and enforces local, State, and federal fire and life safety codes. The Bureau's responsibilities include a wide range of activities and programs, including fire inspections, re-inspections, land development project reviews, fire code developments, fire sprinkler and alarm system plan reviews, new business license inspections, fire code permit inspections, vegetation management and weed abatement programs, public education, hazardous materials inspections, and providing awareness and identification for businesses.

Insurance Services Office Rating

According to the Insurance Services Office (ISO) Public Protection Classification Program, MFD rates as a 3, on a scale of 1 to 10, with 1 as the highest possible protection rating and 10 the lowest. The ISO rating measures individual fire protection agencies against a Fire Suppression Rating Schedule, which includes such criteria as facilities and support for handling and dispatching fire alarms, first-alarm response and initial attack, and adequacy of local water supply for fire-suppression purposes. The ISO ratings are used to establish fire insurance premiums.

Manteca Ambulance Service

The Manteca District Ambulance Service (MDAS) covers a 100-square-mile area and has two stations, one in Manteca and the other in the City of Lathrop. The MDAS has 36 employees and eight ambulances. Two 24-hour ambulances and one 12-hour ambulance respond from the Manteca station each day of the week. One 24-hour ambulance responds from the Lathrop station each day of the week. The MDAS has mutual aid agreements with the cities of Ripon, Tracy, and Escalon. The MDAS employs 20 paramedics and 16 emergency medical technicians (EMTs).

Police Protection

While the San Joaquin County Sheriff's Office in French Camp currently provides law enforcement services to the project site, upon annexation of the proposed project into the City limits, the Manteca Police Department (MPD), would assume responsibility for providing police protection to the location. MPD is headquartered at 1001 West Center Street and operates a full-service



Dispatch and Communications Center (DCC), staffed by two lead dispatchers and eight police dispatchers. The DCC provides a minimum of two on-duty dispatchers each day of the year.

Organization and Staffing

The MPD is organized into two divisions: Operations and Services. Additionally, the MPD includes an Administration office. The following provides a more in-depth discussion of each:

Administration

Administration handles scheduling, grant writing, budget development oversight, confidential files, training, staff reports, police revisions, and other functions. Administration includes the Office of the Chief. The Chief of Police is responsible for the overall management and direction of the MPD's programs and activities and the dissemination of public information.

Operations Division

The Operations Division is the MPD's largest division and includes all of the MPD's uniformed police officers. The division is responsible for providing direct police response to requests for assistance. Operations includes units that have been specially trained and equipped to meet various needs of the community and includes Patrol, Canine Units, Mounted Patrol, Explosive Ordinance Disposal (Bomb Squad), SWAT, and the Crisis Response Team.

The Patrol unit is responsible for providing most front-line law enforcement services for the department. The MPD currently has 74 sworn officers. Patrol vehicles include mobile communication terminals and car video systems. Additionally, Patrol officers are equipped with a case containing cellular telephones, digital cameras, and night-vision equipment. Patrol is overseen by the Operations Captain. The department divides calls for service into three categories:

- Priority 1 calls, where a threat is posed to life or a crime of violence;
- Priority 2 calls, where there is an urgency or suspicious behavior; and
- Priority 3 calls, where no emergency or serious problem is involved.

The MPD received roughly the same number of Priority 1 calls in 2019 and 2020: 187 and 202, respectively. The MPD received approximately 1,811 Priority 2 calls in 2019, compared with 1,301 in 2020, and 2,267 Priority 3 calls in 2019, compared with 1,568 in 2020. Per General Plan Policy PF-P-39, the City, through adequate staffing and patrol arrangements, seeks to maintain the minimum feasible police response times for police calls.

Services Division

The Services Division is made up of several individual units, including Detectives, the Street Crimes Unit, the Gang Unit, Records, Property and Evidence, Dispatch, and Animal Services. The Services Division consists of an approximate total of 95 full-time, part-time and volunteer employees, including six supervisors and the Division Commander, who oversees the management and operations of the units. The Services Division's primary goal is to provide support services to the Operations Division and to the community. The Services Division's investigators follow up on all serious felony cases and target illegal activities related to narcotics, gangs, and vice. Dispatch handles all incoming 911 calls and other calls for service.



Schools

The project site is located within the boundaries of the Ripon Unified School District (RUSD), which consists of two high schools, five schools serving transitional kindergarten/kindergarten through eighth grade, and an online academy school. According to the California Department of Education's enrollment data, the RUSD served a total of 4,663 students during the 2019-20 academic year, including 3,379 students at the school district's seven school sites, 1,280 students in the online California Connections Academy, as well as four students served through other programs. Ripon High School is located 3.51 miles southeast of the project site. The closest RUSD elementary schools to the project site are Weston Elementary, located 3.07 miles to the southeast of the site, and Park View Elementary School, located three miles to the east. Table 4.11-1 shows the enrollment total of schools within the RUSD for the 2019-20 academic year.

Table 4.11-1 Ripon Unified School District Enrollment By Facility	
School Facility	2019-20 Enrollment
Colony Oak Elementary	473
Park View Elementary	470
Ripon Elementary	463
Ripona Elementary	477
Weston Elementary	468
Ripon High School	1,000
Harvest High School	28
<i>Source: RUSD. Facilities Assessment and Implementation Plan. January 2021.</i>	

Parks and Recreation Facilities

The City's Parks and Recreation Department would serve as the park provider for residents of the proposed project, with the City currently featuring 68 park facilities (see Figure 4.11-1). Many parks are co-located with a small detention basin that serves a particular neighborhood. As such, parks are typically located within walking distance to local communities. Per the City's General Plan, the City maintains a standard of five acres of developed neighborhood and community parkland per 1,000 residents within the City limits.

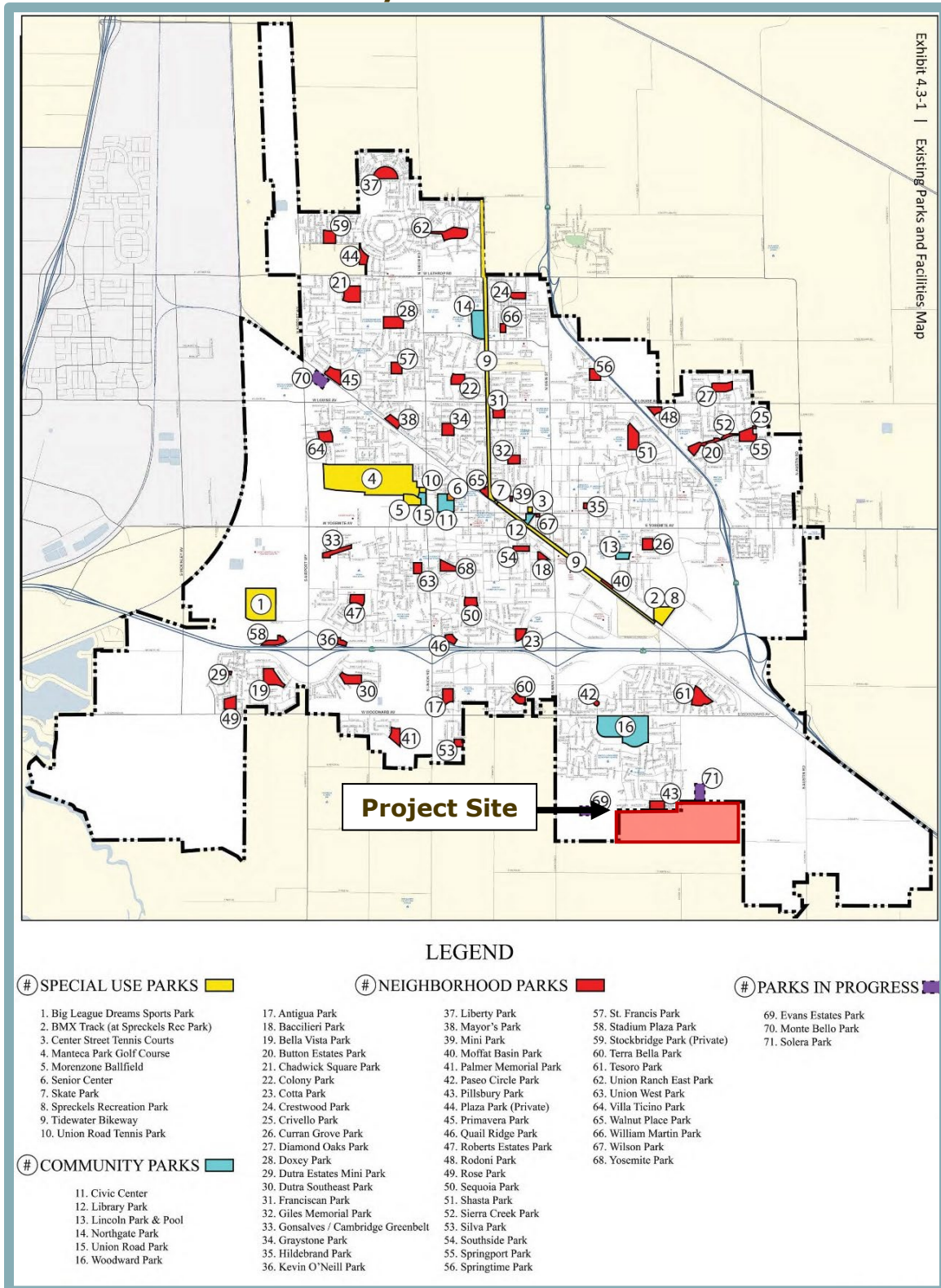
The nearest neighborhood park facility to the proposed project is Pillsbury Park, which abuts the northern border of the proposed project's West Parcel. In addition, Woodward Park, a community park located approximately 2,856 feet to the north of the project site at 710 East Woodward Avenue, offers more than 50 acres of recreational space, including picnic tables, barbecues, playground equipment, basketball courts, restrooms, and sports fields.

Manteca Branch Library

The Stockton-San Joaquin County Public Library (SSJCPL) maintains 13 branches to serve the residents of San Joaquin County. The Manteca Branch Library is located at 320 West Center Street in downtown Manteca and operates five days a week (Monday through Friday). The library was constructed in 1961 and is a 14,396-square-foot facility. The library is the information and learning center for the City and also serves outlying unincorporated County areas. The library is also the current repository for local government documents and ordinances.



**Figure 4.11-1
City Park Facilities**



Source: City of Manteca. Parks and Recreation Master Plan. Approved December 6, 2016.



Water Service Area

As noted in the WSA prepared by West Yost, the City's 2015 Urban Water Management Plan (UWMP) Planning Area corresponds with the City's Sphere of Influence (SOI), established in the City's 2023 General Plan. The City's current water distribution service area coincides with the City limits, but the water distribution system would be extended to areas within the 2015 UWMP Planning Area, outside of the existing City limits, as such areas are approved for development and annexation into the City. Water demands not served by the City (e.g., agriculture, schools) rely on private groundwater wells and the South San Joaquin Irrigation District (SSJID) surface water for their supply.

Currently, the City limits encompass an area of about 13,746 acres. The total existing developed land is made up of approximately 64 percent residential land uses; 18 percent commercial, industrial, and institutional land uses; and 18 percent agriculture, parks, landscape, and other land uses. As noted in the WSA, according to the California Department of Finance, the City's population in 2020 was 84,800. The current and projected water service area populations for the City area summarized in Table 4.11-2. For the purposes of the WSA, the City elected to use the 1980 to 2020 average annual population growth rate of 3.1 percent to project the population of the water service area through 2045.

Table 4.11-2 Historical and Projected Population for City of Manteca Water Service Area	
Calendar Year	Estimated Population
2020	84,800
2025	98,833
2030	115,187
2035	134,248
2040	156,463
2045	182,354
Source: West Yost. Hat Ranch Water Supply Assessment. November 2021.	

The proposed project is anticipated to utilize local groundwater and treated surface water from SSJID's South County Water Supply Program (SCWSP) for the project's water supply. The following provides a more in-depth discussion on each water source, based on information provided by the WSA.

Groundwater

The City's groundwater wells are located in the Eastern San Joaquin Groundwater Subbasin (ESJGS), which is a subbasin of the San Joaquin Valley Groundwater Basin. The groundwater aquifers underlying the City have been identified to include four geologic formations. In increasing depth from the surface, the identified aquifers are Victor Formation, Laguna Formation, Mehrten Formation, and Valley Springs Formation. Due to the alluvial generation of these aquifers, a significant variation in grain size exists, with lenses and strata of high yield gravel, permeable sandy material and lower permeability clays. In general, the strata slope from the hills east of the City downward to the west, providing good recharge from hill runoff as well as from the Stanislaus River. The City's wells primarily draw water from the Laguna and Victor Formations aquifers.

In compliance with the Sustainable Groundwater Management Act (SGMA), a basin management plan has been created for the ESJGS. The Eastern San Joaquin Groundwater Subbasin



Groundwater Sustainability Plan (GSP) was prepared in September 2004. A final draft of the GSP was prepared in November 2019, with all participating agencies and jurisdictions approving the GSP by the end of 2019. Per the GSP, groundwater levels in some portions of the ESJGS have been declining for many years, while groundwater levels in other areas have remained stable or increased in recent years. The change in groundwater levels varies across the ESJGS, with the greatest declines occurring in the central portion. The western and southern portions have experienced less change in groundwater levels, in part due to minimal groundwater pumping in the delta area to the west and the import of surface water for agricultural and urban uses. The GSP and other regulatory requirements of the SGMA are anticipated to impact the City's water supply; however, the exact nature and extent of the impact is not currently known. The GSP establishes a sustainable yield, which for the purposes of the SGMA, is defined as "the maximum quantity of water, calculated over a base period representative of long-term conditions in the basin and including any temporary surplus, that can be withdrawn annually from a groundwater supply without causing an undesirable result" (California Water Code Section 10721[w]). Sustainable yield for the ESJGS was calculated through development of model run in which the goal was to generate a long-term (50-year) change in subbasin groundwater storage of zero. To achieve a net-zero change in groundwater storage over such a planning period, the GSP determined that approximately 78,000 acre-feet per year (AFY) of direct or in-lieu groundwater recharge and/or reduction in agricultural and urban groundwater pumping would need to be implemented in the ESJGS to reduce projected groundwater pumping to the sustainable yield.⁶

The City owns and operates 17 potable water wells and 31 irrigation wells. The City's annual potable groundwater production has steadily increased historically, reaching a peak of 14,900 AF in 2004; however, commissioning of the SCWSP in 2005 decreased groundwater use considerably. Since 2005, the City has constructed dedicated irrigation wells at many parks in an effort to reduce potable demand. According to the WSA, in 2000, the City pumped approximately 1.2 AFY per acre (AFY/acre), but pumping decreased to approximately 0.7 AFY/acre in 2010 and to approximately 0.5 AFY/acre in 2015. It should be noted that when the City annexes new areas, the safe yield remains unchanged; however, the volume of available groundwater increases with the annexation of land into the City. The City's current safe yield is one AFY/acre.

Because numerous wells drawing from the ESJGS are not owned by the City, pumping could affect the amount of groundwater available to the City within the groundwater basin safe yield. Wells currently in operation not owned by the City include private domestic wells, agricultural wells, wells for school irrigation owned by the Manteca Unified School District (MUSD), and irrigation wells owned by SSJID, among others. Well completion reports obtained from Department of Water Resources (DWR) suggest that approximately 1,000 water wells have been constructed within the City's General Plan planning area since record keeping began in the 1960s; however, many may not have been registered as abandoned. Most domestic wells are assumed to no longer be in use, though further investigation would be needed to verify the assumption.

Groundwater Quality

Per the City's 2019 Water Quality Report to Consumers, a source water assessment (SWA) was completed in December, 2001 for all existing City wells. New wells have an SWA completed prior to the well producing any water for consumption by customers. The wells are considered most vulnerable to confirmed leaking underground storage tanks (USTs), gas stations,

⁶ Eastern San Joaquin Groundwater Authority. *Eastern San Joaquin Groundwater Subbasin Groundwater Sustainability Plan* [pg. 2-142]. November 2019.



chemical/petroleum processing/storage facilities, metal plating/finishing/fabricating facilities, automobile body/repair shops and sewer collection systems.

Surface Water

The principal component of future water supply for the City involves deliveries from SSJID's SCWSP. The City, along with three other cities/retail water suppliers (Escalon, Lathrop, and Tracy), signed water supply agreements with SSJID for treated potable water. As part of the SCWSP, SSJID supplies water and the cities compensate the SSJID, accordingly.

The Nick C. DeGroot Water Treatment Plant (WTP) is commissioned for the SCWSP and is currently operated by SSJID at 5855 Dodds Road in the City of Oakdale. The WTP has a total Phase I capacity of 31,522 AFY, with Phase II capacity anticipated to be 43,090 AFY. Phase II has not yet been implemented but is expected by 2040, according to the SSJID. Currently, the City is allotted 11,500 AFY under Phase I and a total of 18,500 AFY under Phase II. The term of the City's current water supply agreement with SSJID is through December 2029. The City and SSJID signed a new contract to extend the aforementioned contract through 2049. Historically, the City has not utilized its full allocation of Phase I surface water due to system constraints and, more recently, State and SSJID supply limits, in response to drought.

Surface Water Quality

Per the City's 2019 Water Quality Report to Consumers, the Woodward Reservoir/Stanislaus River source of surface water is considered most vulnerable to recreational activities at Woodward Reservoir, confined animal facilities (dairy), cattle grazing, and wastewater disposal. Treated surface water from Woodward Reservoir is purchased by the City from SSJID.

Wastewater Conveyance and Treatment

The overall trunk sewer strategy in the City consists of a combination trunk sewer gravity collection system with pump or lift stations located along the alignment to convey wastewater to an influent pump station located at the Manteca-Lathrop Water Quality Control Facility (WQCF). Interim pump stations are constructed as needed and gradually phased out as the collection system is completed. As noted in the City's General Plan (see Policy PF-P-20), the City develops new sewage treatment and trunk line capacity, as necessary to serve new development.

The City's sewer service area is contiguous with the City limits, and is divided into north, south and central sewer sheds. The municipal wastewater collection system includes 242 miles of sewer mains and 19 pump stations. The project site is located in collection Zone 24. The collection system includes gravity flow pipes ranging from six inches to 60 inches in diameter, and force mains from six inches to 24 inches in diameter. The existing collection system generally serves the developed portions of the City, with major trunk sewers located in the core of the City in the central sewer shed. The collection system is generally bounded by SR 120 to the south, Austin Road to the east, Lathrop Road to the north, and Airport Way to the west.

Per the City's 2012 Wastewater Collection System Master Plan Update (WCSMPU),⁷ the City's overall General Plan planning area is divided into three sewer sheds, referred to as "collection strategies." The North Manteca Collection Strategy (NMCS) and South Manteca Collection Strategy (SMCS) collect flow from areas where future growth is expected. The Central Manteca Collection Strategy (CMCS) connects the existing collection system to the NMCS. The backbone

⁷ City of Manteca. 2012 Wastewater Collection System Master Plan Update. Adopted 2013.



of the SMCS is the South Manteca Trunk Sewer (SMTS) along Woodward Avenue. The SMTS accommodates near-term growth in the City's southern communities and does not require obtaining additional right-of-way.

Wastewater is conveyed for treatment to the WQCF, located on 210 acres of City-owned property southwest of downtown Manteca at 2450 West Yosemite Avenue. The WQCF treats municipal wastewater generated in the City and the neighboring City of Lathrop. The WQCF is an activated-sludge plant with denitrification and has an average day dry weather (ADWF) capacity of 9.87 million gallons per day (MGD). The WQCF consists of an influent pump station, aerated grit tanks, primary sedimentation basins, fine-bubble activated sludge aeration basins, secondary clarifiers, secondary effluent equalization pond, tertiary filters, ultraviolet light (UV) disinfection, and effluent pumping station. Primary treatment at the WQCF consists of aerated grit removal and primary sedimentation. Secondary treatment at the facility consists of nitrification and denitrification in activated sludge aeration basins and subsequent secondary sedimentation.

Undisinfected secondary effluent is either stored for agricultural irrigation use in a 15-million-gallon pond or blended with food processing waste and reused directly to agricultural fields. The agricultural fields are used to grow crops for dairy feed. The land application area consists of 126 acres owned by the City, plus another 70 acres owned by Dutra Farms, Inc. Secondary effluent not used for crop demands undergoes tertiary treatment, including rapid mixing, flocculation, cloth media filtration, and UV disinfection. Disinfected treated tertiary effluent is either pumped to a recycled water holding tank, which supplies either a truck fill station for construction vehicles to receive recycled water for construction purposes or is used for landscape irrigation. Disinfected tertiary treated effluent not utilized as recycled water is discharged year-round through a 36-inch diameter pipe into the San Joaquin River. As the practice of discharging to fields is gradually phased out due to land development, effluent will increasingly be discharged to the river.

To accommodate population growth, the City has planned for expansion of the WQCF. The City's Wastewater Collection System Master Plan, adopted in 2004 and updated in 2012, projects a capacity requirement of 27 MGD at buildout for the WQCF. Expansion of the WQCF to buildout is planned to occur in two phases, increasing the ADWF capacity first to 17.5 MGD, and then to 27 MGD. Upon buildout, the City would be allocated 23 MGD of available capacity and the City of Lathrop would be allocated the remaining four MGD. Cost for construction of the NMCS, SMCS, and CMCS are presented in the Capital Improvement Program portion of the WCSMPU and are intended to provide the City with information in updating Public Facilities Improvement Program (PFIP) fees and capital improvement projects. The total project costs for the three strategies are identified in the PFIP at \$54,936,000. The City evaluates the PFIP fee structure on a continuous basis to assure that sufficient funds are generated from developments to pay for the various public improvements needed to provide wastewater treatment and collection services for the existing and increased population and commercial activities.

Storm Drainage System

The City's stormwater drainage system is managed by the City's Public Works Department. The backbone of the City's storm drains is a long-standing relationship with the SSJID that allows use of the SSJID's drains and laterals. The City system includes approximately 150 miles of pipelines, 52 pump stations and 54 detention basins. SSJID owns a complex network of irrigation laterals and drains that run within the City limits to which the City pumps stormwater, which is conveyed to the San Joaquin River either directly or via the French Camp Outlet Canal.



An agreement between the City and SSJID requires that the City monitor stormwater discharges to SSJID facilities to make sure that facilities capacities are not exceeded. The City is also required to control stormwater quality to meet applicable regulations. A master plan of the City's storm drain system was adopted in 2013 in order to forecast needs of the system as established in the 2003 General Plan for Manteca, as amended. The City's National Pollutant Discharge Elimination System (NPDES) permit is also managed by the Public Works Department. Chapter 4.8, Hydrology and Water Quality, of this EIR provides further details on the requirements associated with the City's NPDES permit.

Detention basins in the City's stormwater drainage system are used to detain runoff to attenuate peak flows before pumping drainage flows into SSJID facilities. Where required to meet NPDES permit requirements, stormwater is treated prior to release to natural water bodies within the area. Treatment is provided at detention basin sites, or by on-site source control. Most of the City's pump stations pump from detention basins into the SSJID laterals and drains. The City system also includes 10 water level monitoring stations that are used to obtain real-time water level measurements at critical low points in the system, to prevent flooding. The storm drain system is monitored and controlled remotely through a Supervisory Control and Data Acquisition system. The City's stormwater detention basins are designed based on a 10-year, 48-hour duration storm for urbanized areas and a 10-year, 24-hour duration storm for rural areas. Detention basins are required to be emptied over a 96-hour period.

Solid Waste

The City of Manteca Solid Waste Division collects solid waste throughout the City and deposits it at the Lovelace Solid Waste Transfer Station. Recyclable materials are sorted at the Lovelace facility. Solid waste that is not recyclable is then transferred to other landfills in the area, including, but not limited to, the following:

1. Austin Road/Forward Landfill (I.D. SWIS #39-AA-0001): This green waste landfill has a closure date of 2053 and has a remaining capacity of 1,608,752 cubic yards (CY).⁸
2. Forward, Inc. (I.D. SWIS #39-AA-0015): This solid waste landfill has a remaining capacity of 22,100,000 CY.⁹

Gas and Electricity/Telephone/Cable

Pacific Gas & Electric Co. (PG&E), an investor-owned utility based in San Francisco, is the electricity and natural gas provider for the City of Manteca. PG&E's rates are regulated by the California Public Utilities Commission. The utility provides electricity and natural gas to the majority of Northern California. While PG&E would have the resources to meet a wide range of projected growth for the City, additional improvements to the infrastructure that would supply electricity and natural gas to the project could be required. PG&E owns and operates electricity and natural gas infrastructure within the City, with the company's utility lines already located within the existing neighborhood roadways to the north and west of the project site. In accordance with General Plan Policy PF-I-17, which requires that utility lines be undergrounded in new development and redeveloped areas, new utility lines necessary for serving the proposed project would be installed within the project site's roadways.

⁸ City of Manteca. *City of Manteca General Plan 2023 Environmental Impact Report*. [pg 14-5]. Certified October 6, 2003.

⁹ California Department of Resources Recycling and Recovery. *SWIS Facility/Site Activity Details: Forward Landfill, Inc. (39-AA-0015)*. Available at: <https://www2.calrecycle.ca.gov/SolidWaste/SiteActivity/Details/1434?siteID=3106>. Accessed March 2021.



Telephone services in Manteca are provided by Verizon, and telephone lines would be installed underground at the project site in accordance with City requirements. The existing community is equipped with high-speed internet infrastructure. Cable television services and internet services are provided through Comcast Xfinity. Telecommunications infrastructure is already located within the existing neighborhood roadways to the north and west of the project site. New infrastructure necessary for serving the proposed project would be installed underground in accordance with General Plan Policy PF-I-17.

4.11.3 REGULATORY SETTING

A number of federal, State, and local policies provide the regulatory framework applicable to public services, utilities, and service systems. The following discussion summarizes those laws that are most relevant to the project site.

Federal Regulations

The following are the federal environmental laws and policies relevant to the proposed project.

Clean Water Act

The Clean Water Act (CWA) is the cornerstone of water quality protection in the U.S. The statute employs a variety of regulatory and nonregulatory tools to sharply reduce direct pollutant discharges into waterways, finance municipal wastewater treatment facilities, and manage polluted runoff. The tools are employed to achieve the broader goal of restoring and maintaining the chemical, physical, and biological integrity of the nation's waters so that they can support "the protection and propagation of fish, shellfish, and wildlife and recreation in and on the water." The CWA regulates discharges from "non-point source" and traditional "point source" facilities, such as municipal sewage plants and industrial facilities. The CWA makes it illegal to discharge pollutants from a point source to the waters of the U.S.

National Pollutant Discharge Elimination System

The NPDES regulatory program falls under Section 402 of the CWA and requires point sources to obtain a discharge permit from the proper authority. NPDES permits cover industrial and municipal discharges, discharges from storm sewer systems in larger cities, stormwater associated with numerous kinds of industrial activity, runoff from construction sites disturbing more than one acre, mining operations, and animal feedlots and aquaculture facilities above certain thresholds. All so-called "indirect" dischargers are not required to obtain NPDES permits. An indirect discharger is one that sends wastewater into a city sewer system, and eventually goes to a sewage treatment plant. Though not regulated under NPDES, "indirect" discharges are covered by another CWA program, called pretreatment. "Indirect" dischargers send their wastewater into a city sewer system, which carries the wastewater to the municipal sewage treatment plant, through which the wastewater passes before entering surface water. Permit requirements for treatment are expressed as end-of-pipe conditions. The set of numbers reflects levels of three key parameters: (1) biochemical oxygen demand (BOD), (2) total suspended solids (TSS), and (3) pH acid/base balance. The levels could be achieved by well-operated sewage plants employing "secondary" treatment. Primary treatment involves screening and settling, while secondary treatment uses biological treatment in the form of "activated sludge."



National Pretreatment Program

The National Pretreatment Program is a component of the NPDES program and is a cooperative effort of federal, State, and local regulatory environmental agencies established to protect water quality. The program is designed to reduce the level of pollutants discharged by industry and other non-domestic wastewater sources into municipal sewer systems and thereby reduce the amount of pollutants released into the environment through wastewater. The objectives of the program are to protect the Publicly Owned Treatment Works (POTW) from pollutants that may interfere with plant operation, to prevent pollutants that may pass through untreated from being introduced into the POTW, and to improve opportunities for the POTW to reuse wastewater and sludges that are generated. The term "pretreatment" refers to the requirement that non-domestic sources discharging wastewater to POTWs control their discharges, and meet limits established by the U.S. Environmental Protection Agency (USEPA), the state or local authority on the amount of pollutants allowed to be discharged. The control of the pollutants may necessitate treatment prior to discharge to the POTW (therefore the term "pretreatment"). Limits may be met by the non-domestic source through pollution prevention techniques (product substitution recycle and reuse of materials) or treatment of the wastewater.

Safe Drinking Water Act

The Safe Drinking Water Act (SDWA), enacted in 1974, gives the USEPA the authority to set standards for contaminants in drinking water supplies. The SDWA was amended in 1986 and amended and reauthorized in 1996. For each of the contaminants listed in the SDWA, the EPA sets a maximum contaminant level or treatment technique for contaminants in drinking water.

State Regulations

The following are the State environmental laws and policies relevant to the proposed project.

California Green Building Code

The California Building Code (CBC) contains standards that regulate the method of use, properties, performance, or types of materials used in the construction, alteration, improvement, repair, or rehabilitation of a building or other improvement to real property. The CBC is adopted every three years by the Building Standards Commission (BSC). The 2019 California Green Building Standards Code, otherwise known as the CALGreen Code, is the most recent version of the Code. For residential structures, the CALGreen Code is administered by the California Department of Housing and Community Development (HCD).

In addition to the new State-wide mandates, CALGreen encourages local governments to adopt more stringent voluntary provisions, known as Tier 1 and Tier 2 provisions, to further reduce air pollutant emissions, improve energy efficiency, and conserve natural resources. If a local government adopts one of the tiers, the provisions become mandates for all new construction within that jurisdiction. The most significant features of the CALGreen Code related to public services and utilities include the following:

- Mandatory reduction in indoor water use, through the use of high-efficiency toilets, faucet aerators and other fixtures; and
- Diversion of 65 percent of construction waste from landfills.



Urban Water Management Planning Act

In 1983, the Legislature enacted the Urban Water Management Planning Act (UWMPA, Water Code Sections 10610 – 10656). The UWMPA requires that every urban water supplier that provides water to 3,000 or more customers, or that provides over 3,000 AF of water annually to prepare and adopt an urban water management plan. The UWMPA states that urban-water suppliers shall make every effort to ensure the appropriate level of reliability in their water service sufficient to meet the needs of the various categories of customers during normal, dry, and multiple dry years. The UWMPA further states that the management of urban water demands and the efficient use of water shall be actively pursued to protect both the people of the State and their water resources.

The proposed project is anticipated to be served water by way of the City's groundwater wells and treated surface water from SSJID's SCWSP. As such, the WSA prepared for the proposed project incorporates information from both the City's and SSJID's most recent UWMPs. The latest UWMP prepared for the City was in 2015. The SSJID completed its most recent UWMP in June 2021.

State Water Resources Control Board

The State Water Resources Control Board (SWRCB) manages all water rights and water quality issues in California under the terms of the Porter-Cologne Water Quality Control Act (1969). The California Department of Health Services (DHS) has been granted primary enforcement responsibility for the SDWA (see above). Title 22 of the California Administrative Code establishes DHS authority and stipulates drinking water quality and monitoring standards. The standards are equal to or more stringent than the federal standards.

California Water Code

The California Water Code requires coordination between land use lead agencies and public water purveyors. The purpose of this coordination is to ensure that prudent water supply planning has been conducted and that planned water supplies are adequate to meet both existing demands and the demands of planned development.

Water Code Sections 10910 – 10915 (inclusive), sometimes referred to as SB 610, require land use lead agencies: 1) to identify the responsible public water purveyor for a proposed development project, and 2) to request from the responsible purveyor, a "Water Supply Assessment." The purposes of the WSA are (a) to describe the sufficiency of the purveyors' water supplies to satisfy the water demands of the proposed development project, while still meeting the current and projected water demands of customers, and, (b) in the absence of a currently sufficient supply to describe the purveyor's plans for acquiring additional water. Water Code Sections 10910-10915 delineate the specific information that must be included in the WSA.

According to CEQA Guidelines Section 15155, a "water-demand project" means:

- A. A residential development of more than 500 dwelling units.
- B. A shopping center or business establishment employing more than 1,000 persons or having more than 500,000 square feet of floor space.
- C. A commercial office building employing more than 1,000 persons or having more than 250,000 square feet of floor space.
- D. A hotel or motel, or both, having more than 500 rooms.



- E. An industrial, manufacturing, or processing plant, or industrial park planned to house more than 1,000 persons, occupying more than 40 acres of land, or having more than 650,000 square feet of floor area.
- F. A mixed-use project that includes one or more of the projects specified in subdivisions (a)(1)(A), (a)(1)(B), (a)(1)(C), (a)(1)(D), (a)(1)(E), and (a)(1)(G) of this section.
- G. A project that would demand an amount of water equivalent to, or greater than, the amount of water required by a 500 dwelling unit project.
- H. For public water systems with fewer than 5,000 service connections, a project that meets the following criteria:
 - 1. A proposed residential, business, commercial, hotel or motel, or industrial development that would account for an increase of 10 percent or more in the number of a public water system's existing service connections; or
 - 2. A mixed-use project that would demand an amount of water equivalent to, or greater than, the amount of water required by residential development that would represent an increase of 10 percent or more in the number of the public water system's existing service connections.

The Hat Ranch Project meets criterion A.

Sustainable Groundwater Management Act

The DWR has developed a Strategic Plan for its Sustainable Groundwater Management (SGM) Program. DWR's SGM Program will implement the new and expanded responsibilities identified in the 2014 SGMA (Division 6, Part 2.74, Sections 10720 – 10727.8, of the California Water Code). The expanded responsibilities include the following:

- 1. Developing regulations to revise groundwater basin boundaries;
- 2. Adopting regulations for evaluating and implementing GSPs and coordination agreements;
- 3. Identifying basins subject to critical conditions of overdraft;
- 4. Identifying water available for groundwater replenishment; and
- 5. Publishing best management practices for the sustainable management of groundwater.

Senate Bill 1016

Enacted in 2007, SB 1016 amended portions of the California Integrated Waste Management Act, allowing the California Integrated Waste Management Board (CIWMB) to use per capita disposal as an indicator in evaluating compliance with the requirements of Assembly Bill (AB) 939. Jurisdictions track and report their per capita disposal rates to CalRecycle.

California Integrated Waste Management Act

To minimize the amount of solid waste that must be disposed of in landfills, the State Legislature passed the California Integrated Waste Management Act of 1989 (AB 939), effective January 1990. Solid waste plans are required to explain how each city's AB 939 plan would be integrated with the County plan. In order of priority, the plans must promote source reduction, recycling and composting, and environmentally safe transformation and land disposal.

California Fire Code

The California Fire Code contains regulations relating to construction, maintenance, and use of buildings. Topics addressed in the Fire Code include fire department access, fire hydrants, automatic sprinkler systems, fire alarm systems, fire and explosion hazards safety, hazardous



materials storage and use, provisions intended to protect and assist fire responders, industrial processes, and many other general and specialized fire-safety requirements for new and existing buildings and the surrounding premises. The Fire Code contains specialized technical regulations related to fire and life safety.

California Health and Safety Code

State fire regulations are set forth in Sections 13000 et seq. of the California Health and Safety Code, including regulations for building standards (as also set forth in the CBC), fire protection and notification systems, fire protection devices such as extinguishers and smoke alarms, high-rise building and childcare facility standards, and fire suppression training.

Proposition 1A/Senate Bill 50

Proposition 1A/Senate Bill (SB) 50 (Chapter 407, Statutes of 1998) is a school construction measure primarily for modernization and rehabilitation of older school facilities and construction of new school facilities. Proposition 1A/SB 50 implemented significant fee reforms by amending the laws governing developer fees and school mitigation.

- Establishes the base (statutory) amount (indexed for inflation) of allowable developer fees at \$1.93 per square foot for residential construction and \$0.31 per square foot for commercial construction.
- Prohibits school districts, cities, and counties from imposing school impact mitigation fees or other requirements in excess of or in addition to those provided in the statute.

Proposition 1A/SB 50 also prohibits local agencies from using the inadequacy of school facilities as a basis for denying or conditioning approvals of any “[...] legislative or adjudicative act [...] involving [...] the planning, use, or development of real property” (Government Code 65996[b]). Additionally, a local agency cannot require participation in a Mello-Roos for school facilities; however, the statutory fee is reduced by the amount of any voluntary participation in a Mello-Roos. Satisfaction of the Proposition 1A/SB 50 statutory requirements by a developer is deemed to be “full and complete mitigation.” The law identifies certain circumstances under which the statutory fee can be exceeded, including preparation and adoption of a “needs analysis,” eligibility for State funding, and satisfaction of two of four requirements (post-January 1, 2000) identified in the law including: year-round enrollment, general obligation bond measure on the ballot over the last four years that received 50 percent plus one of the votes cast, 20 percent of the classes in portable classrooms, or specified outstanding debt. Assuming a district qualifies for exceeding the statutory fee, the law establishes ultimate fee caps of 50 percent of costs where the State makes a 50 percent match, or 100 percent of costs where the State match is unavailable. District certification of payment of the applicable fee is required before the County can issue the building permit.

Quimby Act

California Government Code Section 66477, Subdivision Map Act, referred to as the Quimby Act, permits local jurisdictions to require the dedication of land and/or the payment of in-lieu fees solely for park and recreation purposes. The required dedication and/or fees are based upon the residential density, parkland cost, and other factors. Land dedication and fees collected pursuant to the Quimby Act may be used for acquisition, improvement, and expansion of park, playground, and recreational facilities or the development of public school grounds.



Local Regulations

The following are the local laws and policies relevant to the proposed project.

City of Manteca General Plan 2023

The City's General Plan identifies the following goals and policies to provide further protection to public services, recreation, utilities, and service systems.

Fire Protection

- | | |
|----------------|--|
| Policy PF-P-42 | The City shall endeavor to maintain an overall fire insurance (ISO) rating of 4 or better. |
| Policy PF-P-43 | The City shall endeavor through adequate staffing and station locations to maintain the minimum feasible response time for fire and emergency calls. |
| Policy PF-P-44 | The City shall provide fire services to serve the existing and projected population. |

Police

- | | |
|----------------|--|
| Policy PF-P-39 | The City shall endeavor through adequate staffing and patrol arrangements to maintain the minimum feasible police response times for police calls. |
| Policy PF-P-40 | The City shall provide police services to serve the existing and projected population. |
| Policy PF-I-23 | The Planning Commission and City Engineer will review proposed residential developments to evaluate the accessibility for police patrols and emergency response. |

Parks and Recreation

- | | |
|----------------|--|
| Goal PF-14 | Establish and maintain a park system and recreation facilities that support economic development and residential growth in the City. |
| Goal PF-15 | Establish and maintain a park system and recreation facilities that are suited to the needs of Manteca residents and visitors. |
| Goal PF-17 | Establish a recreation program that is suited to the needs and interests of all Manteca residents. |
| Policy PF-P-46 | The City shall expand the community and neighborhood park system with the goal of providing neighborhood park facilities within reasonable walking distance of all city residential areas. |
| Policy PF-P-47 | The City shall use joint development of park and drainage detention basins in the development of neighborhood parks. |
| Policy PF-P-49 | City park acquisition and development efforts shall be based on a goal of five acres of developed neighborhood and community |



parkland per 1,000 residents within the city limits. The distribution of land between neighborhood and community parks shall be determined within the Parks and Recreation Master Plan.

- Policy PF-P-53 All new residential development will be required to pay a park acquisition and improvement fee, based on providing five acres per 1,000 residents, to fund system-wide improvements.
- Policy PF-P-54 The City shall require the provision of private open space and recreational facilities as part of new residential developments.
- Policy PF-I-27 The City shall periodically review projected park development needs and plans, update cost estimates for park acquisition and development, and remaining development potential based on the General Plan.

Library Services

Goal ED-4 Expand education and training opportunities for City residents at all levels.

- Policy ED-I-27 Encourage efforts to provide learning opportunities for all residents by providing modern library resources and programs.

Water Supply

Goal PF-7 Maintain an adequate level of service in the City's water system to meet the needs of existing and projected development.

- Policy PF-P-4 Secure sufficient sources of water to meet the needs of the existing community and planned residential and commercial growth.
- Policy PF-P-5 City will continue to rely principally on groundwater resources for its municipal water in the near term, will participate in the regional improvements to deliver surface water to augment the City's groundwater supply.
- Policy PF-P-6 The City shall develop new water sources as necessary to serve new development.
- Policy PF-P-7 The City shall develop new water storage facilities and major distribution lines as necessary to serve new development.
- Policy PF-P-8 The City will provide water for future development to maintain a balance of jobs and housing.
- Policy PF-P-9 City water services shall not be extended to unincorporated areas except in extraordinary circumstances. Existing commitments for City water service outside the City limits shall continue to be honored.



- Policy PF-P-11 The City will develop and implement water conservation measures as necessary elements of the water system.
- Policy PF-P-12 The City shall continue to assess a water development fee on all new commercial, industrial, and residential development sufficient to fund systemwide capacity improvements. The water development fee schedule shall be periodically reviewed and revised as necessary.
- Policy PF-P-13 Ensure that all new development provides for and funds a fair share of the costs for adequate water distribution, including line extensions, easements, and plant expansions.
- Policy PF-P-14 The City shall continuously monitor water flows through the City's water system to identify areas of potential water loss and cases of under billing for water service and shall make improvements in the systems as necessary.
- Policy PF-P-15 The City shall monitor water quality regularly and take necessary measures to prevent contamination.
- Policy PF-P-17 The City of Manteca shall consider incremental increases in the demands on groundwater supply and water quality when reviewing development applications.
- Policy PF-I-3 The City shall require, as a condition of project approval, dedication of land and easements, or payment of appropriate fees and exactions, to help offset municipal costs of expansion of water treatment facilities and delivery systems.
- Policy PF-I-4 The City shall retain a water conservation ordinance requiring the installation of low-flush toilets, low-flow showerheads, and similar features in all new development.
- Policy PF-I-5 The City shall institute a remote monitoring program for the city's water system and replace faulty meters in the system as necessary. The City will continue the practice of identifying and replacing faulty meters at service connections on an ongoing basis.

Wastewater

- Goal PF-8 Maintain an adequate level of service in the City's sewage collection and disposal system to meet the needs of existing and projected development.
- Policy PF-P-18 Ensure wastewater collection and treatment for all development in the City and the safe disposal of wastes.
- Policy PF-P-19 The City will maintain capacity to process combined residential, commercial, and industrial flow.



- Policy PF-P-20 The City shall develop new sewage treatment and trunk line capacity as necessary to serve new development.
- Policy PF-P-21 City sewer services will not be extended to unincorporated areas, except in extraordinary circumstances. Existing commitments for sewer service outside the city limits shall continue to be honored.
- Policy PF-P-23 The City shall establish and maintain a growth management plan to ensure the development of a balanced mix of residential, commercial, industrial, and public land uses.
- Policy PF-P-24 Ensure that all new development provides for and funds a fair share of the costs for adequate sewer distribution, including line extensions, easements, and plant expansions.
- Policy PF-P-25 The City will maintain the ability to handle peak discharge flow while meeting State Regional Water Quality Control Board Standards as established in the current NPDES Permit.
- Policy PF-I-9 The City will require all sewage generators within its service area to connect to the City's system, except those areas where on-site treatment and disposal facilities are deemed appropriate.
- Policy PF-I-12 The City will promote reduced wastewater system demand through efficient water use by:
- Requiring water conserving design and equipment in new construction;
 - Encouraging retrofitting with water conserving devices;
 - Designing wastewater systems to minimize inflow and infiltration to the extent economically feasible; and
 - Maintaining a Citywide map of all sewer collection system components and monitoring the condition of the system on a regular basis.

Stormwater

Goal PF-9 Maintain an adequate level of service in the City's drainage system to accommodate runoff from existing and projected development and to prevent property damage due to flooding.

- Policy PF-P-26 The City shall continue to complete gaps in the drainage system in areas of existing development.
- Policy PF-P-27 The City shall require the dedication and improvement of drainage detention basins as a condition of development approval according to the standards of the Drainage Master Plan. The responsibility for the dedication and improvement of



detention basins shall be based on the prorated share of stormwater runoff resulting from each development.

- Policy PF-P-28 Storm drainage systems within new development areas shall include open drainage corridors where feasible to supplement or replace an underground piped drainage system. The drainage systems would provide for short-term storm water detention, storm water conveyance for storm waters exceeding a 10-year event, storm water quality treatment, bike and pedestrian paths, and visual open space within neighborhoods. The width and length of the corridors would be determined by the stormwater management requirements. The drainage systems would provide a pedestrian connection between parks and access to open space from residential neighborhoods. The neighborhoods would be designed with homes oriented to, rather than backing on the open space corridor.

Solid Waste

- Goal PF-11 Provide for the implementation and enforcement of the provisions for the Source Reduction and Recycling Element, as mandated by the State.
- Goal PF-12 Maintain efficient, effective and economical solid waste services for the residents, businesses and visitors to Manteca.
- Policy PF-P-31 The City will implement and enforce the provisions of its Source Reduction and Recycling Element.
- Policy PF-P-32 The City shall support the continued use of the Lovelace Transfer Station on Lovelace Road, between Union Road and Airport Way, for the processing and shipping of solid waste materials.

Electricity

- Goal PF-10 The City shall ensure adequate, reliable electric service is available to all users in the City.
- Policy PF-P-29 Ensure that reliable, adequate electric service is available to all users in the City.
- Policy PF-P-30 Cooperate with and encourage efforts to expand the opportunities for electric power service in the City.
- Policy PF-I-15 The City will support energy conservation measures and innovative uses of solar energy, heat recovery, and co-generation in all structural and industrial processes.
- Policy PF-I-16 The City will confer with utility companies regarding major development plans and cooperate with planning extension of utilities.



Policy PF-I-17 The City will require undergrounding of utility lines in new development, and as areas are redeveloped, except where infeasible for operational reasons.

City of Manteca Public Facilities Implementation Plan

The PFIP is the implementing program for public infrastructure policies identified in the City's General Plan. The purpose of the PFIP is to ensure that certain public infrastructure needed for growth – namely water, wastewater, storm drainage, and transportation facilities – are sufficient to support the City's growth, in accordance with the General Plan. Another purpose of the PFIP is to ensure that infrastructure is constructed in a timely manner and financed in a way that equitably divides financial responsibility in proportion to the demands placed on the new facilities. The PFIP uses a development impact model wherein the City assumes some responsibility for funding and constructing major facilities, while the developers – in most cases – simply pay a proportionate share to reimburse the City for the cost to finance and construct the infrastructure.

San Joaquin County LAFCo

The following are applicable policies from San Joaquin County LAFCo's Change of Organization Policies and Procedures (Including Annexations and Reorganizations).

General Standards for Annexation and Detachment

The General Standards for Annexation and Detachment govern LAFCo determinations regarding annexations and detachments to and from all agencies. The following policies apply to the proposed project.

1. Spheres and Municipal Service Reviews

The annexation or detachment must be consistent with the internal planning horizon of the sphere of influence. The land subject to annexation shall normally lie within the first planning increment (5 to 10 year) boundary. The annexation must also consider the applicable Municipal Service Review. An annexation shall be approved only if the Municipal Services Review and the Sphere of Influence Plan demonstrates that adequate services can be provided with the timeframe needed by the inhabitants of the annexed area. If detachment occurs, the sphere will be modified. LAFCo generally will not allow spheres of influence to be amended concurrently with annexation proposals. Proposed annexations of land that lie outside of the first planning horizon (5 to 10 year) are presumed to be inconsistent with the Sphere Plan. In such a case the agency must first request LAFCo to consider a sphere amendment pursuant to the above policies. If the amendment is approved, the agency may then proceed with the annexation proposal. A change of organization or reorganization will not be approved solely because an area falls within the SOI of any agency. As an exception to the presumed inconsistency mentioned above, Master Plan and Specific Plan developments may span several planning horizons of the sphere of influence. Annexation of the entire project area may be desirable in order to comprehensively plan and finance infrastructure and provide for amenity-based improvements. In these cases, no amendment of the planning horizon is necessary provided project phasing is recognized in the Sphere of Influence Plan.

2. Plan for Services

Every proposal must include a Plan for Services that addresses the items identified in Section 56653 of the Government Code. The Plan for Services must be consistent with the Municipal Service Review of the Agency. Proponents must demonstrate that the city or special district is capable of meeting the need for services.



11. Service Requirements

An annexation shall not be approved merely to facilitate the delivery of one or a few services to the detriment of the delivery of a larger number of services or service more basic to public health and welfare.

12. Adverse Impact of Annexation on the Other Agencies

LAFCo will consider any significant adverse effects upon other service recipients or other agencies serving the area and may condition any approval to mitigate such impacts. Significant adverse effects shall include the effect of proposals that negatively impact special districts' budgets or services or require the continuation of services without the provision of adequate funding. LAFCo will not approve detachments from special districts or annexations that fail to provide adequate mitigation of the adverse impact on the district. LAFCo may determine an appropriate temporary mitigation, if any, and impose that temporary mitigation to the extent it is within its powers. If the needed mitigation is not within LAFCo's authority and approval would, in the opinion of the Commission, seriously impair the District's operation, the Commission may choose to deny the application.

Ripon Unified School District

The RUSD maintains a residential developer fee of \$4.45 per square foot for all construction of new dwellings, in accordance with Proposition 1A/SB 50.

4.11.4 IMPACTS AND MITIGATION MEASURES

The following section describes the standards of significance and methodology used to analyze and determine the proposed project's potential impacts related to public services, utilities, and service systems. In addition, a discussion of the project's impacts, as well as mitigation measures where necessary, is also presented.

Standards of Significance

An impact is considered significant, consistent with Appendix G of CEQA Guidelines, if the proposed project would result in any of the following:

- Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:
 - Fire protection;
 - Police protection;
 - Schools;
 - Parks; or
 - Other public facilities.
- 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;
- Include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment;
- 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 relocation of which could cause significant environmental effects;
- Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years;
 - 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;
 - 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; or
 - Comply with federal, State, and local management and reduction statutes and regulations related to solid waste.

Method of Analysis

Determinations of the significance of the proposed project's potential impacts were made based on the City's projections related to public services and utilities, as well as the City's projected raw and potable water supplies, the latter of which is detailed in the WSA prepared for the proposed project. The method for analyzing the proposed project's impacts on public services as well as a discussion on the evaluation performed as part of the WSA is discussed in further detail below.

Fire Protection and Police Services

The approach to analyzing a project's impacts on fire protection and police services, pursuant to CEQA, is often misunderstood. Industry practice has often focused on any type of demand upon a fire or police department or district that may be generated by a project, such as an increased need for staffing, or the need for new equipment. Such considerations are important, but they are not CEQA considerations, per se. The important point can be seen by a careful reading of the language in Appendix G of the CEQA Guidelines (Section XV. Public Services). The language focuses on whether a project's increase in demand is such that a fire service or law enforcement provider would need to build new or expand existing governmental facilities in order to maintain acceptable service ratios, response times, or other performance objectives. The reason for such focus is that building new facilities, or expanding existing facilities, requires construction activities and disturbance of the physical environment, which is the focus of CEQA.

According to CEQA Guidelines Section 15002(g), a significant effect on the environment is defined as a substantial adverse change in the physical conditions which exist in the area affected by the proposed project. "Environment" means the physical conditions that exist within the area which would be affected by a proposed project, including land, air, water, minerals, flora, fauna, noise, or objects of historic or aesthetic significance (Public Resources Code Section 21060.5). The courts have affirmed such understanding. In the case *City of Hayward v. Board of Trustees of the California State University*, the First District Court of Appeal affirmed that the focus of CEQA analysis should be limited to physical environmental impacts related to a project.¹⁰ The court held that, "The need for additional fire protection services is not an *environmental* impact that CEQA requires a Project Proponent to mitigate."

¹⁰ First District Court of Appeal. *City of Hayward v. Board of Trustees of the California State University*. (November 30, 2015) 242 Cal.App.4th 833.



With such important understanding, the analysis proceeds with appropriately focusing on an evaluation of whether the proposed project's demand upon fire service and law enforcement providers would generate the need to build new facilities or expand existing facilities.

Schools, Parks, and Other Public Facilities

The threshold for analyzing the proposed project's impact to RUSD facilities pertains to the project's compliance with Proposition 1A/SB 50. Satisfaction of the Proposition 1A/SB 50 statutory requirements by a developer is deemed to be "full and complete mitigation." Similarly, the threshold for analyzing the proposed project's impact to the City's Parks and Recreation Facilities involves evaluating the project's consistency with applicable General Plan policies and compliance with Chapter 3.20 (Park Acquisition and Improvement Fees) of the Municipal Code. Lastly, because the SSJCPL's Manteca Public Library is funded through County use tax revenues, the proposed project's impact to other public facilities, which primarily includes the Manteca Public Library, is analyzed through determining how the project would be subject to the County's use tax, which is detailed in Division 2.5 – Transactions and Use Tax for Countywide Library Programs and Operations in Title 3 of the County's Code of Ordinances.

Water Supply Assessment

A WSA was prepared by West Yost to evaluate the proposed project in accordance with the requirements set forth by Water Code Sections 10910 through 10915 (SB 610). The WSA incorporated by reference the City's 2015 UWMP and SSJID's 2020 UWMP. The City's 2015 UWMP includes existing and projected water demands for existing and projected land uses to be developed within the City through 2040. For the purposes of the WSA, the City elected to use the 1980 to 2020 average annual population growth rate of 3.1 percent to project the population of the water service area through 2045.

In addition, the projected potable water demand and supplies documented in the WSA are based on the GSP prepared for the ESJGS and the City of Manteca Draft General Plan Update.

Project-Specific Impacts and Mitigation Measures

The following discussion of impacts related to public services, utilities, and service systems is based on implementation of the proposed project in comparison to existing conditions and the standards of significance presented above:

4.11-1 Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for fire protection and emergency medical services. Based on the analysis below, the impact is considered *less than significant*.

The proposed project would include implementation of a master planned residential community of up to 738 single-family residences and half-plex units, two neighborhood parks, an elementary/middle school, and associated circulation improvements on approximately 184.7 acres. Based on the City's average of three persons per



household, as noted in the General Plan EIR, the proposed project's residential units could potentially result in 2,214 new residents in the City. The increase in population would increase the demand for fire protection services. The relevant CEQA threshold pertains to whether new or physically altered stations are needed to meet response times or other performance objectives, the construction of which could cause environmental impacts.

The nearest MFD facility to the project site is Station 245, located approximately 0.7-mile north of the project site. Consistent with General Plan Policy PF-P-43, which requires that the City endeavor to maintain the minimum feasible response time for fire and emergency calls, the opening of Station 245 allows the MFD to achieve the full-alarm standard outlined by National Fire Protection Association (NFPA) 1710 for residents in the City's southeast communities. In accordance with the NFPA 1710 standard, the MFD maintains a goal for the initial company of three firefighters to arrive on scene for fire and emergency medical service within five minutes, 90 percent of the time, with the response time measured by when the 911 call is received at the call center to the time of arrival of the first responder. As the project site is located within the SOI, adjacent to the City's existing southeast communities, and is less than a mile from Station 245, the MFD would be able to respond to fire and emergency calls received from future residents of the proposed project within the full-alarm standard. Due to the location of Station 245, the proposed project would not result in the need for new or expanded fire protection facilities.

All structures constructed as part of the proposed project would be designed in compliance with Section 16.23.030(B) of the City's Municipal Code and all applicable provisions of the California Fire Code. As part of compliance with Section 16.23.030(B), the proposed project would be required to install a water system for the subdivision with such equipment, pipelines, and facilities as may be necessary to ensure the neighborhood has an adequate supply of water for domestic and fire protection purposes. Furthermore, as set forth in Section 16.23.030(B)(7) of the Municipal Code, construction plans for such water supply and distribution system are required to be supplied by the project applicant to the City's Public Works Department and MFD for approval to ensure the water supply and distribution system is consistent with City standards. Compliance with the aforementioned regulations would ensure that the demand for fire protection is reduced to the maximum extent feasible.

Lastly, the project applicant would be subject to the Municipal Code's Fee Schedule, which includes payment of the City's Fire Facility Fee as part of obtaining a building permit (\$0.29 per square foot for single-family residential development) and the Water Facilities Development Fee, which is determined by meter size. Revenues generated from such fees would help fund the expansion of existing facilities or construction of new facilities associated with maintaining fire protection and water services in the City, analysis of which would be required prior to construction of all environmental issue areas required under CEQA. Such analysis would ensure all potential environmental impacts related to the construction of new or expanded fire protection facilities are properly evaluated.

Based on the above information, the proposed project would not result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the



construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for fire protection and emergency medical services. Therefore, the impact would be ***less than significant***.

Mitigation Measure(s)

None required.

4.11-2 Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for police protection services. Based on the analysis below, the impact is considered *less than significant***.**

Police protection services are provided in the City by the MPD, which operates from headquarters located at 1001 West Center Street, approximately 2.8 miles to the northwest of the project site. The Fiscal Year 2019-2020 budget for the MPD was \$18,627,912, which was deemed sufficient by the City to cover the current staffing levels. The need for additional personnel is addressed by the Chief of Police, the City Manager, and the City Council as response times are reassessed annually and as budget allows. Response times to calls for service oftentimes depends upon the location of the responding patrol officer; however, it is important to note that the MPD does not have adopted response time goals.

Upon annexation into the City limits, the proposed project would increase the demand for law enforcement services provided by MPD, which could affect the department's ability to respond to Priority 1 or 2 calls. However, the MPD obtains funds from several revenue streams, including the City's Gang and Drug Prevention, 9-1-1 Emergency and Public Safety Improvement Transactions and Use Tax (Chapter 3.09 of the Municipal Code) and the City's Government Building Facilities Use Fee, the latter of which is required as part of obtaining a building permit (\$4,362.53 per unit for low-density residential development). As such, the proposed project would contribute funding for the MPD through paying applicable City taxes and fees. While assessing the extent to which the proposed project would necessitate additional law enforcement staff would be speculative, funds generated from the collection of the foregoing fees would assist in addressing future staffing needs.

Similar to the analysis of fire protection services under Impact 4.11-1, the relevant CEQA threshold for analyzing potential impacts related to law enforcement services pertains to whether new or physically altered stations would be needed to meet response times or other performance objectives, the construction of which could cause environmental impacts. As mentioned, the MPD does not currently have an adopted response time goal. Given the City's determination that the most recent MPD budget was sufficient to accommodate the existing policing needs of the City, the proposed



project is not anticipated to result in the need for new or expanded police facilities. Additionally, evaluating such potential needs and/or sites that could accommodate future police facilities would be speculative. Furthermore, while new development within the City's SOI would lead to population growth, which could potentially result in the need for additional police services, the expanded tax base that would result from such development would provide funding for police services; development and connection fees would address capital costs; and user charges would address the operating expenses of new development. Lastly, should the City identify the need for new or expanded police facilities in the future as a result of population growth in the City, analysis of all environmental issue areas required under CEQA would be required related to such development, prior to construction. Such analysis would ensure all potential environmental impacts related to the construction of new or expanded police facilities are properly evaluated.

Based on the above information, while the proposed project would increase the demand for law enforcement services provided by MPD, the project would not necessitate the need for new or expanded police facilities. Therefore, the proposed project would not result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for police protection. Thus, the impact would be ***less than significant***.

Mitigation Measure(s)

None required.

4.11-3 Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for schools and other public facilities. Based on the analysis below, the impact is considered *less than significant***.**

The following analysis addresses the proposed project's potential impacts related to the provision of facilities and services provided by RUSD schools and other public facilities.

Schools

The project site is located within the boundaries of the RUSD, which includes two high schools and five elementary schools. The RUSD served 4,663 total students, according to the California Department of Education's enrollment data for the 2019-20



academic year.¹¹ Ripon High School is located 3.5 miles southeast of the project site. The closest existing RUSD elementary schools to the project site are Weston Elementary, located approximately 3.1 miles to the southeast of the site, and Park View Elementary School, located three miles to the east.

The RUSD's Facilities Assessment and Implementation Plan does not provide estimates regarding the extent to which available capacity exists to accommodate future student population growth. Similarly, the City's General Plan does not include such estimates. However, the City's General Plan EIR includes a projected student yield rate, which provides estimates on the number of student-aged children a residential unit would be reasonably expected to generate. The student yield rate was based on a student generation analysis completed for the MUSD, the school district that serves the majority of students in the City. While the student yield rate was prepared for the MUSD, the rate provides a reasonable projection on how many students the proposed project could generate that would be served by the RUSD. Table 4.11-3 shows the yield rate for various grade levels and the anticipated number of students generated by the proposed project.

Table 4.11-3		
City of Manteca Projected Student Yield Rate		
Grade Level	Yield Rate	Students Generated by Proposed Project
K-6	0.534 per unit	394.626
7-8	0.147 per unit	108.633
9-12	0.267 per unit	197.313
Total		700.572
Source: City of Manteca. City of Manteca General Plan 2023 EIR. October 6, 2003.		

Based on the yield rates provided in the General Plan EIR, implementation of the proposed project could result in as many as 701 students that would be served by the RUSD. However, as detailed in Table 4.12-1 of the Transportation chapter of this EIR, the proposed school site that would be developed as part of the proposed project would have a 675-student capacity, which would reduce the project's potential impact related to demand for school services.

General Plan Policy PF-P-33 provides that the City will cooperate with school districts serving the City in locating and reserving appropriate sites for new neighborhood walking distance schools, with adequate facilities planned to accommodate new residential development. The proposed project would be consistent with Policy PF-P-33, as the project includes a 16.1-acre site in the East Parcel that would be developed with an elementary/middle school. The school site would include a paved hard-court area and four basketball courts, in addition to classrooms, administrative offices, and parking areas. Two soccer fields and a baseball diamond would also be included as part of the school's dedicated recreational areas. Design of the proposed school would ultimately fall under the jurisdiction of the RUSD. Thus, the proposed project's school site would help address the number of new students generated by the project's residential units.

¹¹ California Department of Education. *Enrollment by School*. Available at: <https://www.cde.ca.gov/ds/sd/sd/filesenr.asp>. Accessed April 2021.



Furthermore, the proposed project would be subject to the residential developer fee. Per the RUSD's website, the current residential developer fee for the school district is \$4.45 per square foot for all new construction. Payment of such fees would satisfy the requirements set forth by Proposition 1A/SB 50, which prohibits local agencies from using the inadequacy of school facilities as a basis for denying or conditioning approvals of any "legislative or adjudicative act involving the planning, use, or development of real property." (Government Code 65996[b]). Satisfaction of the Proposition 1A/SB 50 statutory requirements by a developer is deemed to be "full and complete mitigation." Therefore, according to SB 50, the payment of the necessary school impact fees for the project would be full and satisfactory CEQA mitigation and the project's impact related to the provision of school services would be less than significant.

Other Public Facilities

Residents of the proposed project would have access to the SSJCPL's Manteca Public Library, located at 320 West Center Street, approximately 2.45 miles to the northwest of the project site. While the proposed project's increase to the City's population could result in increased demand for services offered by the Manteca Public Library, future residents would be subject to the County's Transactions and Use Tax For Countywide Library Programs and Operations. Per Division 2.5, Title 3 of the County's Code of Ordinances, the tax is imposed on retail transactions in the incorporated and unincorporated territories of the County. Revenues are then used exclusively for Countywide library programs and operations. Additionally, the project applicant would be subject to the County's Facilities Fee (Section 9-1245.1 of the County Code of Ordinances), which is collected by the City prior to the issuance of a building permit. For single-family residential developments, the fee is assessed at a rate of \$1,826 per dwelling unit, according to the Development Fees listed in the City's Fee Schedule. Payment of all applicable fees and taxes would ensure the proposed project results in a less-than-significant impact to other public facilities.

Conclusion

Based on the above information, through compliance with required impact development fees, City policies, and the project's addition of parkland and a school site, the proposed project would not result in a significant impact associated with the provision or need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts related to schools and other public facilities. Thus, the impact would be ***less than significant***.

Mitigation Measure(s)

None required.

4.11-4 Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered parks, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, or increase the use of existing neighborhood and regional parks such that substantial physical deterioration would occur or be accelerated, or



include or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment. Based on the analysis below, the impact is considered *less than significant*.

The City's Parks and Recreation Department provides 68 parks totaling more than 400 acres. The nearest neighborhood park facility to the project site is Pillsbury Park, which abuts the northern border of the proposed project's West Parcel. In addition, Woodward Park, a community park located approximately 0.5-mile to the north of the project site at 710 East Woodward Avenue, offers more than 50 acres of recreational space, including picnic tables, barbecues, playground equipment, basketball courts, restrooms, and sports fields.

The proposed project would generate approximately 2,214 new residents, which would increase the demand of park facilities in the project vicinity. Using the City's goal of five acres of parkland per 1,000 residents established by Policy PF-P-49, the proposed project would require approximately 11.1 acres of new parkland. With the adoption of a General Plan Amendment for the project site's land use designation, approximately 16.2 acres of parkland would be implemented as part of the proposed project. However, after subtracting the parkland acreage that would be devoted to stormwater basins, the proposed park sites would feature 6.3 acres of parkland, which would fall short of the acreage of new parkland that would be required for the proposed project to be consistent with Policy PF-P-49. Should the City determine that the proposed project would need to account for the remaining 4.8 acres of parkland acreage, pursuant to Manteca Municipal Code Section 3.20.090, the proposed project would be subject to the City's Neighborhood Park In-lieu Fee to account for the difference. Therefore, through payment of the Neighborhood Park In-lieu Fee (if necessary), the proposed project would be consistent with Policy PF-P-49 through the provision of new parkland.

Potential impacts associated with the proposed project's park uses are analyzed throughout the various technical chapters of this EIR. The parkland would be divided into two park areas located on the eastern and western sides of Pillsbury Road, referred to as East Neighborhood Park and West Neighborhood Park, respectively. As such, the potential increase in demand for park facilities stemming from the potential population growth associated with the proposed project would be met through the proposed project's parkland components.

The proposed project would be consistent with all applicable policies contained in the General Plan related to parks. For example, Policy PF-P-46 requires that the City expand community and neighborhood parks with the goal of providing neighborhood park facilities within reasonable walking distance of City residential areas. The proposed project would include parkland within less than a mile of Pillsbury Park and Woodward Park. The project would also include drainage bioretention and detention basins in the project site's park uses, consistent with Policy PF-P-47.

Based on the above information, the proposed project would not 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 related to parks; 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; or include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment. Therefore, impacts would be ***less than significant***.

Mitigation Measure(s)

None required.

4.11-5 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 relocation of which could cause significant environmental effects. Based on the analysis below, the impact is considered *less than significant*.

The following sections describe the water, wastewater treatment, stormwater drainage, electric power, natural gas, and telecommunications facilities improvements that would be necessary to serve the proposed project.

Water Supply Infrastructure

Water services would be provided to the proposed project through the City's Utility Services Division. The City receives water supplies from two sources: groundwater from local wells, and surface water supplied by the SSJID. The SSJID operates a water treatment plant near the SSJID's Woodward Reservoir, and the treated water is conveyed to Manteca through a series of pipelines. Manteca's municipal water supply system is based on an interconnected grid design, wherein new development expands the existing grid system and new municipal water wells are added, as needed, to maintain adequate water supply.

Consistent with Section 16.23.030 of the Municipal Code, which requires a subdivider to install a water system for the land division, together with such equipment, pipelines, and facilities as may be necessary to ensure the land division has an adequate supply of water for domestic and fire protection purposes, water would be provided to the project site by way of new connections to the existing water infrastructure adjacent to the project site. The proposed project would be provided connections to existing water lines, which are currently stubbed in the neighborhood roadways in the Pillsbury Estates and Woodward Park developments to the north and Evans Estates to the west. As part of the proposed project, the existing stub streets of Polk Street, Buena Vista Drive, Inyo Avenue, and Jigsaw Avenue would be extended into the project site. New water pipes would similarly be extended from the existing stubbed water pipes, which would ensure adequate flow to all portions of the project for both domestic use and fire protection.

As shown in Figure 3-6 and Figure 3-7 in the Project Description chapter of this EIR, the proposed water system within the project's new interior neighborhood roadways would connect to a new water main within the right-of-way (ROW) of the future Antone



Raymus Parkway, which would be located parallel to the project site's southern boundary. The new water main within Antone Raymus Parkway would then be extended westward within the road's ROW to the Manteca Road/Antone Raymus Parkway intersection, at which point the water main would be extended northward to connect to the existing City water main within Manteca Road (see Figure 3-8 in the Project Description chapter of this EIR). Additionally, with the extension of Atherton Drive along the eastern perimeter of the project site, the existing water main, currently stubbed at the terminus of Atherton Drive, would be extended southward in the newly constructed portion of Atherton Drive, where the water pipe would eventually connect to the new water main within Antone Raymus Parkway. Lastly, the proposed project would allocate space for a future 125-foot by 150-foot parcel for a City-operated water well within the East Neighborhood Park to accommodate new development within the City.

As discussed in further detail under Impact 4.11-6, per the WSA prepared for the proposed project, the total projected water supplies determined to be available during normal, single dry, and multiple dry water years during a 20-year projection would meet the project's water demand, in addition to existing and planned future uses in the City. Demand within the City's service area is not expected to exceed the City's supplies in any year between 2020 and 2040. In the event that unanticipated deficits occur, the shortfall would be reduced through implementation of the City's Water Shortage Contingency Plan, which is detailed in Chapter 8 of the City's 2015 UWMP and includes voluntary conservation measures, mandatory conservation measures, and allocation/rate-based measures.

Furthermore, as required by Section 13.38.040 of the Municipal Code, the project applicant would be subject to the City's Water Development Fee to ensure payment of an equitable share of the cost of meeting future water demands created by the proposed project. Additionally, per Section 13.04.020 of the Municipal Code, the developer would be subject to connection fees and capacity charges prior to connection of new water meters.

Based on the above information, the project applicant would comply with Municipal Code requirements for establishing water supply infrastructure in accordance with City standards and future water demands created by the proposed project would be addressed by the applicant through applicable fees. Therefore, the proposed project would result in a less-than-significant impact to the City's water supply infrastructure.

Wastewater Conveyance and Treatment Infrastructure

The City's WQCF has capacity to treat 9.87 MGD, and currently treats 6.5 MGD. The project site is located in the South Manteca Trunk Sewer shed. Per Section 16.23.030 of the Municipal Code, which contains requirements for subdivisions to connect to the City's sanitary sewer system, the proposed project would establish connection to the sewer main in Manteca Road.

Wastewater from the proposed project would be conveyed through new sanitary sewer pipes located within the site's proposed interior roadways. Similar to the project's water lines, sewer conveyance would be provided to the project site by way of new connections to the existing sewer infrastructure adjacent to the project site. The proposed project would connect to existing sewer lines, which are currently stubbed



in the neighborhood roadways of the surrounding single-family residential communities. With the extension of existing stub streets Polk Street, Buena Vista Drive, Inyo Avenue, and Jigsaw Avenue into the project site, new sewer lines would similarly be extended through the project site. The project's on-site wastewater infrastructure would connect to a new sewer main that would be located within the ROW of Antone Raymus Parkway. The new sewer main would be extended westward to the Manteca Road/Antone Raymus Parkway intersection, at which point the sewer main would connect to a new off-site sewer lift station and existing sanitary sewer lines within Manteca Road, where wastewater would flow north, eventually connecting to the existing wastewater main along Woodward Avenue. As part of ensuring payment of an equitable share of the cost of mitigating future sewer demands created by the proposed project, the project applicant, per Section 13.38.050 of the Municipal Code, would be subject to the City's Sewer Facilities Development Fee.

The City anticipates buildout of the General Plan to result in a total demand for wastewater flows of approximately 18.9 MGD, including demand associated with existing development. The existing and projected demand would be well within the planned capacity of the WQCF, as the City has estimated that wastewater flows would have a buildout capacity of 27 MGD, with the City allocated 23 MGD and the City of Lathrop allocated the remaining four MGD. The City's overall collection sewer strategy would consist of a combination trunk sewer gravity collection system with pump or lift stations located along the alignment to convey wastewater to an influent pump station located at the WQCF. The NMCS and SMCS would collect flows from areas where future growth is expected, including areas that would be added to the SOI. The CMCS would connect the existing collection system to the NMCS. The total project costs for the three strategies are identified in the PFIP at \$54,936,000. The City evaluates the PFIP fee structure on a continuous basis to assure that sufficient funds are generated from developments to pay for the various public improvements needed to provide wastewater treatment and collection services for the existing and increased population and commercial activities. The project applicant would pay PFIP fees related to the sanitary sewer system through the Sewer Facilities Development Fee.

Based on the above information, the project applicant would comply with Municipal Code requirements for establishing connection to the City's sanitary sewer system, the WQCF would have sufficient capacity to accommodate the project's wastewater treatment needs, and future sewer conveyance demands created by the proposed project would be addressed by the applicant through payment of the Sewer Facilities Development Fee. Therefore, the proposed project would result in a less-than-significant impact to the City's sanitary sewer system.

Stormwater Drainage Infrastructure

Section 16.23.030 of the City's Municipal Code requires a subdivider to make those improvements deemed necessary by the City Engineer for, among other things, drainage and erosion control. As part of such requirements, a subdivider is required to obtain or provide land dedication or easements on land within or outside the land division, as deemed necessary by the City Engineer, for protection against flooding, sedimentation, or other damage to property or improvements within or outside the land division. Per Section 16.23.030(D)(4) of the Municipal Code, all drainage improvements are subject to inspection and approval by the Public Works Department. Additionally, Chapter 13.28 of the Municipal Code establishes minimum stormwater



management requirements and controls to minimize the total annual volume of surface water runoff that flows from any specific site during and following development to not exceed the pre-development runoff flows to the maximum extent practicable.

As part of compliance with Section 16.23.030 of the Municipal Code, stormwater facilities required for the proposed project, including storm drain inlets and pipes, would be constructed consistent with the specifications established in the City's Department of Public Works Standard Specifications. Stormwater from both the East Parcel and the West Parcel would first be treated in each area's respective stormwater bioretention basin.

Within the East Parcel, stormwater from residences would flow through new drain inlets and connections to underground storm drain pipes, which would direct flows to a 3.9-acre detention basin located in the northwest portion of the East Neighborhood Park, adjacent to the elementary/middle school site. The detention basin, which would feature an effective depth of five feet, would be designed to store stormwater to reduce the peak rate of runoff to the storm drainage system during rain or flood events. Following temporary storage in the detention basin, stormwater flows would be pumped by way of a new pump station to a 1.8-acre bioretention basin located in the southwest portion of the park. The bioretention basin would provide stormwater treatment through a series of layers, consisting of a 1.5-foot ponding depth, 1.5-foot media depth, and one foot of gravel. After treatment, stormwater would flow through a pump station and connect to a force main located in Pillsbury Road, which would then extend to SSJID Lateral X.

Within the West Parcel, stormwater from residences would flow through new drain inlets and underground pipes to a 2.8-acre detention basin, located generally within the eastern half of the West Neighborhood Park. The detention basin would similarly be designed with an effective depth of five feet to reduce the peak rate of runoff to the storm drainage system during rain or flood events. Following temporary storage in the detention basin, stormwater flows would be pumped by way of a new pump station to a 1.4-acre bioretention basin located generally within the western half of the park. The bioretention basin would provide stormwater treatment through a series of layers comprised by a 1.5-foot ponding depth, 1.5-foot media depth, and one foot of gravel. After treatment, a second pump station would direct flows to the force main located in Pillsbury Road extending to SSJID Lateral X. From SSJID Lateral X, treated stormwater from both parcels would flow to the French Camp Outlet Canal, which drains to the French Camp Slough and eventually the San Joaquin River. In addition, new storm drain pipes would be located within Antone Raymus Parkway and the newly constructed portion of Atherton Drive, the former of which would connect to the existing SSJID Lateral XB-DD, currently stubbed at the northwest corner of the project site.

Generally, storm drainage improvements that would serve future growth in the City, including through development of the project site, would be consistent with the City's PFIP. The PFIP includes all water, wastewater, storm drainage, and transportation facilities required to meet the City's targets for Level of Service. The PFIP ensures that infrastructure required for growth is constructed in a timely manner and financed in a way that equitably divides financial responsibility in proportion to the demands placed on new facilities. As part of ensuring payment of an equitable share of the cost of mitigating future storm drainage demands created by the proposed project, the project



applicant, per Section 13.38.060 of the Municipal Code, would be subject to the City's Storm Drainage Fee, a fee assessed to property developers as part of the City's PFIP fees.

In addition, to ensure new storm drain facilities are designed in accordance with the City's Department of Public Works Standard Specifications, Section 16.23.070 of the Municipal Code requires a subdivider to submit improvement plans, which are subject to review and approval by the City Engineer. As such, the City Engineer's review and verification of the proposed project's improvement plans would ensure that the project's stormwater drainage facilities are designed to satisfactorily minimize the total annual volume of surface water runoff that flows from the project site during and following development, such that postconstruction runoff flows do not exceed pre-development runoff flows to the maximum extent practicable, in accordance with the requirements set forth in Chapter 13.28 of the Municipal Code.

Based on the above information, the project applicant would comply with Municipal Code requirements for establishing connection to the City's storm drainage system and future demands created by the proposed project would be addressed by the applicant through payment of the Storm Drainage Fee. Therefore, the proposed project would result in a less-than-significant impact to the City's storm drainage system.

Electricity, Natural Gas, and Telecommunications Infrastructure

Electricity and natural gas service for the proposed project would be provided by PG&E. Telecommunications facilities would be provided through Verizon and Comcast Xfinity. Equipment associated with the aforementioned utilities already exists in the immediate vicinity, as low-density residential development associated with the Pillsbury Estates, Woodward Park, and Evans Estates communities is located immediately adjacent to the project site, to the north and west. Therefore, infrastructure associated with the proposed project would merely need to connect to the infrastructure already existing in the project area. As required by Section 16.23.030 of the Municipal Code, utility distribution facilities supplying electricity and communication service would be installed underground and existing power poles and overhead power lines that conflict with project improvements would be relocated, removed, or undergrounded.

Based on the above information, the proposed project would result in a less-than-significant impact to the City's electricity, natural gas, and telecommunications infrastructure.

Conclusion

Based on the above, the proposed project would not require or result in the relocation or construction of new or expanded water, wastewater treatment, or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects. Thus, a **less-than-significant** impact would occur.

Mitigation Measure(s)

None required.



4.11-6 Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years. Based on the analysis below, the impact is considered *less than significant*.

The WSA prepared for the proposed project assessed the City's surface water and groundwater supplies to determine if sufficient water supplies exist to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years. The WSA's evaluation is based on data from the City's 2015 UWMP, the SSJID 2020 UWMP, and estimates for water demand from future land uses that could be facilitated by buildout of the General Plan, in accordance with current General Plan land uses within the City's planning area. The proposed project is anticipated to utilize local groundwater and treated surface water from SSJID's SCWSP. The projected surface water deliveries available to the City are presented in Table 4.11-4.

Table 4.11-4					
SCWSP Surface Water Deliveries to the City (AFY)					
Year	2025	2030	2035	2040	2045
Normal Year	11,500	11,500	11,500	18,500	18,500
Single Dry Year	9,649	10,566	11,483	14,592	15,671
Multiple Dry Year No. 1	11,500	11,500	11,500	18,500	18,500
Multiple Dry Year No. 2	11,500	11,500	11,500	18,500	18,500
Multiple Dry Year No. 3	9,649	10,566	11,483	14,592	15,671
Multiple Dry Year No. 4	9,649	10,566	11,483	14,592	15,671
Multiple Dry Year No. 5	11,500	11,500	11,500	18,500	18,500
Source: West Yost. Hat Ranch Water Supply Assessment. November 2021.					

Under single-year and multiple-year dry period scenarios, deliveries to the City by SSJID could be reduced. The availability and reliability of the City's SCWSP surface water deliveries during dry years were determined based on the following:

- For Single Dry Year reliability, the City based its projected SSJID allocations on the single driest hydrologic year (1977), which would translate to the City receiving 79 to 100 percent of its normal year water supply during a single dry year.
- For Multiple Dry Years reliability, the City based its projected SSJID allocations on the most recent five-year multiple dry year hydrologic cycle (2012 through 2016), which would translate to the City receiving 100 percent of its normal year water supply during the first, second, and fifth years of a multiple dry year scenario and 79 to 100 percent of its normal year supply during the third and fourth years of a multiple dry year scenario.

With respect to groundwater supplies, many factors can affect groundwater supply reliability, including current storage conditions, water quality, seasonal groundwater level variations and climate change. Reduced use by the City, combined with seasonal variations such as intense wet seasons, can result in increased groundwater table elevation. Additionally, all wells are located in the western portion of the SSJID service area and draw from the Eastern San Joaquin Subbasin, the same basin from which the City, the City of Lathrop, the City of Stockton, and other groundwater users draw.



While seasonal fluctuations have a noticeable effect on groundwater elevation, the overall trend showed a decline over time until the City began to use imported surface water in 2005. Historical trends from California Statewide Groundwater Elevation Monitoring (CASGEM) indicate that the basin has experienced groundwater overdraft conditions. The introduction of surface water supply has helped groundwater elevation trends recover within the City by reducing pumping in the area.

The WSA's groundwater supply projections include approved proposed and entitled developments outside of the City limits, but within the City's planning area, and estimated groundwater pumping by others within the planning area. As part of the WSA, West Yost estimated the City's projected water demand for the future land use areas of the General Plan Update, including the proposed project. The groundwater supply projections do not account for groundwater pumping outside the planning area, nor undocumented privately owned domestic or irrigation wells. Groundwater use may increase as the City's population increases, and groundwater use by others (including MUSD and agricultural users) may also increase in single dry years and multiple dry years (when surface water cutbacks occur). Constant groundwater demands from the MUSD and agricultural users are assumed in the projections for all hydrologic scenarios. For the purposes of the WSA, West Yost assumed the City would limit groundwater use to approximately 24,877 AFY (the projected City area at buildout of the General Plan planning area). The projected groundwater availability, assuming a constant growth rate through 2045, is shown in Table 4.11-5.

Table 4.11-5						
Projected Groundwater Production During Hydrologic Normal, Single Dry, and Multiple Dry Years (AFY)						
	2020	2025	2030	2035	2040	2045
Assumed Supply	10,060	11,760	13,747	16,069	18,784	21,957
Notes: Projections in 2020 are based on Table 6-10 of the 2015 UWMP. Projections in all other years are based on 1 AFY of groundwater being available per acre of City surface areas, as discussed in Section 6.3 of the WSA. The projected groundwater production from 2025 to 2045 was interpolated using a constant growth rate and the 2020 (10,060) and General Plan buildout (24,877) values. It should be noted that General Plan buildout is anticipated to occur between 2049 and 2050.						
Source: West Yost. Hat Ranch Water Supply Assessment. November 2021.						

The 2020 value of 10,060 AFY accounts for the area within the City limits and subtracts other estimated groundwater uses within the City limits. As development continues, the largest groundwater usage inside the City limits, agricultural use, would decrease. The groundwater supply shown above assumes the City's available groundwater supply within the safe yield would increase as areas outside the current City limits, but within the City's planning area, are annexed into the City for development.

Finally, through adding the projected surface water and groundwater supply available to City residents, the WSA concluded demand within the City's service area would not exceed the City's supply in any year through 2045. In the event that unexpected deficits occur, the shortfall could be reduced through implementation of the City's Water Shortage Contingency Plan, which is detailed in Chapter 8 of the City's 2015 UWMP and includes both mandatory and voluntary conservation measures and



allocation/rate-based measures. Table 4.11-6 displays supplies and demand for potable and raw water from 2025 to 2045.

Conclusion

Based on the technical analyses described in the WSA, the total projected water supplies determined to be available for the proposed project during normal over a 20-year projection would meet the projected water demand associated with the proposed project, in addition to existing and planned future uses in the City. As discussed, potential shortfalls during single dry and multiple dry water years would be reduced to a less-than-significant level through the City's Water Shortage Contingency Plan. Therefore, the proposed project would result in a **less-than-significant** impact.

Mitigation Measure(s)

None required.

Table 4.11-6					
Projected Supply and Demand for Potable and Raw Water in Normal, Single Dry, and Multiple Dry Years (AFY)					
Hydrologic Condition	2025	2030	2035	2040	2045
<i>Normal Year</i>					
Supply	23,260	25,247	27,569	37,284	40,457
Demand	18,480	21,012	23,891	27,164	30,885
Shortfall Percentage	-	-	-	-	-
<i>Single Dry Year</i>					
Supply	23,260	25,247	27,569	37,284	40,457
Demand	18,480	21,012	23,891	27,164	30,885
Shortfall Percentage	-	-	-	-	-
<i>Multiple Dry Year 1</i>					
Supply	23,260	25,247	27,569	37,284	40,457
Demand	18,480	21,012	23,891	27,164	30,885
Shortfall Percentage	-	-	-	-	-
<i>Multiple Dry Year 2</i>					
Supply	23,260	25,247	27,569	37,284	40,457
Demand	18,480	21,012	23,891	27,164	30,885
Shortfall Percentage	-	-	-	-	-
<i>Multiple Dry Year 3</i>					
Supply	21,409	24,313	27,552	33,376	37,628
Demand	18,480	21,012	23,891	27,164	30,885
Shortfall Percentage	-	-	-	-	-
<i>Multiple Dry Year 4</i>					
Supply	21,409	24,313	27,552	33,376	37,628
Demand	18,480	21,012	23,891	27,164	30,885
Shortfall Percentage	-	-	-	-	-
<i>Multiple Dry Year 5</i>					
Supply	23,260	25,247	27,569	37,284	40,457
Demand	18,480	21,012	23,891	27,164	30,885
Shortfall Percentage	-	-	-	-	-
Source: West Yost. Hat Ranch Water Supply Assessment. November 2021.					



4.11-7 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. Based on the analysis below, the impact is considered *less than significant*.

As discussed above under Impact 4.11-5, the City's WQCF has capacity to treat 9.87 MGD and currently treats 6.5 MGD. As required by Section 16.23.030 of the Municipal Code, the proposed project would establish connection to the City's sanitary sewer system through connecting to the sewer main in Manteca Road by way of new sanitary sewer pipes located within the extensions of the existing stub streets of Polk Street, Buena Vista Drive, Inyo Avenue, and Jigsaw Avenue.

The WQCF treats municipal wastewater from the City of Manteca and the City of Lathrop, and seasonally accepts industrial food processing waste effluent from Eckert Cold Storage. Per a contractual agreement, 8.42 MGD of plant capacity is allocated to the City of Manteca and 1.45 MGD is allocated to the City of Lathrop. However, the City is planning to expand the facility from the currently permitted 9.87 MGD to 27 MGD by buildout, with 23 MGD allocated to the City of Manteca and the remaining four MGD allocated to the City of Lathrop.

Buildout of the General Plan would include development of the project site with the proposed subdivision. The total projected demand of 23 MGD at buildout of the General Plan would be within the City's planned capacity allocation of 23 MGD at the WQCF. The overall collection sewer strategy would consist of a combination trunk sewer gravity collection system with pump or lift stations located along the alignment to convey wastewater to an influent pump station located at the WQCF. The NMCS and SMCS would collect flow from areas where future growth is expected, including the areas within the SOI, which includes the project site. The proposed project would be located within the SMCS. The CMCS would connect the existing collection system to the NMCS. Cost for construction of the NMCS, SMCS, and CMCS are presented in the Capital Improvement Program portion of the City's 2012 Wastewater Collection System Master Plan Update and are intended to provide the City with information in updating PFIP fees and capital improvement projects. The total project costs for the three strategies are identified in the PFIP at \$54,936,000. The City evaluates the PFIP fee structure on a continuous basis to assure that sufficient funds are generated from developments to pay for the various public improvements needed to provide wastewater treatment and collection services for the existing and increased population and commercial activities. As part of ensuring payment of an equitable share of the cost of mitigating future sewer demands created by the proposed project, the project applicant, per Section 13.38.050 of the Municipal Code, would be subject to the City's Sewer Facilities Development Fee, one of several required PFIP Program Fees.

Based on the above information, sufficient capacity would exist to serve the City's existing commitments as well as the wastewater treatment demands generated by the proposed project, and the project applicant would comply with Municipal Code requirements for establishing connection to the City's sanitary sewer system and sewer demands created by the proposed project would be addressed by the applicant through payment of the Sewer Facilities Development Fee. Therefore, the proposed



project would result in a determination by the City that the WQCF has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments, and the proposed project would result in a ***less-than-significant*** impact.

Mitigation Measure(s)

None required.

4.11-8 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, or conflict with federal, State, and local management and reduction statutes and regulations related to solid waste. Based on the analysis below, the impact is considered *less than significant*.

The City of Manteca Solid Waste Division collects solid waste throughout the City and deposits it at the Lovelace Solid Waste Transfer Station. Recyclable materials are sorted at the Lovelace facility. Solid waste that is not recyclable is then transferred to other landfills in the area, including, but not limited to, the following:

1. Austin Road/Forward Landfill (I.D. SWIS #39-AA-0001): This green waste landfill has a closure date of 2053 and has a remaining capacity of 1,608,752 CY.
2. Forward, Inc. (I.D. SWIS #39-AA-0015): This solid waste landfill has a remaining capacity of 22,100,000 CY.

The proposed project would generate solid waste associated with construction activities as well as from future residents of the proposed residents and students and teachers at the proposed school site. Construction debris would be disposed of in accordance with applicable federal, State, and local regulations and standards. At the State level, CALGreen requires covered projects to recycle and/or salvage for reuse a minimum 65 percent of the nonhazardous construction and demolition waste or to meet a local construction and demolition waste management ordinance, whichever is more stringent. At the local level, the proposed project would be required to comply with all applicable regulations included in Chapter 13.02, Solid Waste Collection and Disposal, of the Municipal Code, including Section 13.02.120, which requires all contractors of construction and demolition projects in the City limits where the total cumulative square feet of the project area exceeds 5,000 square feet to recycle all recyclable construction materials.

During operation, residential trash collection would be offered on a weekly basis, with residents offered the choice between three trash collection cart sizes (small, medium, or large). Residential recycling would be offered on a bi-weekly schedule, alternating with green waste. Residents would be offered a medium-sized recycling cart. Due to the substantial amount of available capacity remaining at the landfills serving the City, sufficient capacity would be available to accommodate the project's solid waste disposal needs.



Based on the above, the proposed project would not generate solid waste in excess of State or local standards or in excess of the capacity of local infrastructure, otherwise impair the attainment of solid waste reduction goals, or conflict with federal, State, and local management and reduction statutes and regulations related to solid waste. Therefore, implementation of the proposed project would result in a ***less-than-significant*** impact.

Mitigation Measure(s)

None required.

Cumulative Impacts and Mitigation Measures

As defined in Section 15355 of the CEQA Guidelines, “cumulative impacts” refers to two or more individual effects which, when considered together, are considerable, compound, or increase other environmental impacts. The individual effects may be changes resulting from a single project or a number of separate projects. The cumulative impact from several projects is the change in the environment that results from the incremental impact of the project when added to other closely related past, present, and reasonably foreseeable probable future projects.

For further detail related to the cumulative setting of the proposed project, refer to Chapter 6, Statutorily Required Sections of this EIR.

4.11-9 Increase in demand for public services associated with the proposed project, in combination with future buildout of the City of Manteca. Based on the analysis below, the cumulative impact is *less than significant*.

Potential cumulative impacts related to fire protection and emergency medical service, police protection service, schools, parks, and other public facilities are discussed below.

Fire Protection and Emergency Medical Services

Implementation of the proposed project, in combination with other development within the project vicinity, would result in the increase in demand for fire protection services in the City. As discussed above under Impact 4.11-1, the MFD offers fire protection and emergency medical services within the City limits. The MFD operates out of five facilities, with Station 245, located at the northwest corner of Woodward Avenue and Atherton Drive, allowing the MFD to achieve the full standard outlined by NFPA 1710 for residents in the City’s southeast communities. The MFD maintains a goal for the initial company of three firefighters to arrive on scene for fire and emergency medical service within five minutes, 90 percent of the time. The response time is measured by when the 911 call is received at the call center to the time of arrival of the first responder. The opening of Station 245 allows the MFD to respond within the intended timeframe to more than 90 percent of the City’s residents, consistent with General Plan Policy PF-P-43.

Land surrounding the project site on all sides is currently designated as low-density residential (LDR) by the City’s existing General Plan. The need for additional firefighters in the future would be addressed as warranted by the City. While



cumulative development in the project vicinity would increase demand for MFD's services, developers of future projects would be subject to the Municipal Code's Fee Schedule, which includes payment of the City's Fire Facility Fee as part of obtaining a building permit, and the Water Facilities Development Fee, which is determined by meter size. Fees would help fund needs associated with maintaining fire protection and water services. Additionally, future development would be subject to all applicable regulations of Chapter 15.24 of the Municipal Code, which pertains to enforcement of the California Fire Code.

Additionally, as discussed under Impact 4.11-1, future subdivisions within the LDR parcels surrounding the project site would be designed in compliance with Section 16.23.030(B) of the City's Municipal Code. Section 16.23.030(B) requires developers of subdivided land to install a water system for the subdivision with such equipment, pipelines, and facilities as may be necessary to ensure the neighborhood has an adequate supply of water for domestic and fire protection purposes. Furthermore, as set forth in Section 16.23.030(B)(7), construction plans for such water supply and distribution system are required to be supplied by the project applicant to the City's Public Works Department and MFD for approval to ensure the water supply and distribution system is consistent with City standards.

Therefore, the proposed project would result in a less-than-significant cumulative impact related to fire protection and emergency medical services.

Police Protection Services

Cumulative development within the project vicinity would result in the increase in demand for police protection services in the City. The City currently has 74 sworn officers, and additional officers are planned to be hired, as the City population grows. Staffing levels are assessed by the City on an annual basis, based on a variety of factors, including response times for the MPD's three types of priority calls. The fiscal year 2019-2020 budget was sufficient to cover the current staffing levels. The need for additional personnel is addressed by the Chief of Police, the City Manager, and the City Council as response times are reassessed annually and as budget allows.

Similar to the proposed project, future development within the project vicinity would be subject to applicable City taxes and fees, which would contribute to the MPD's sources of revenue. The MPD obtains funds from several revenue streams, including the City's Gang and Drug Prevention, 9-1-1 Emergency and Public Safety Improvement Transactions and Use Tax (Chapter 3.09 of the Municipal Code) and the City's Government Building Facilities Use Fee, required as part of obtaining a building permit. As such, while new development within the City's SOI would lead to population growth and the need for additional services, the expanded tax base that results from new development would provide funding for public services; development and connection fees would address capital costs; and user charges would address the operating expenses of new development.

Based on the above, future development would contribute to expanding MPD services in the city, and the proposed project would result in a less-than-significant cumulative impact related to police protection services.



Schools

Cumulative development within the City's southeast communities could result in overcrowding at schools in the area. However, each individual development would be required to pay Proposition 1A/SB 50 school impact fees, similar to the proposed project, which would contribute to the facilitation of school expansions in order to serve the needs of the area. Furthermore, as previously discussed under Impact 4.11-3, payment of school impact fees by future projects would be considered full and satisfactory CEQA mitigation. Proposition 1A/SB 50 prohibits local agencies from using the inadequacy of school facilities as a basis for denying or conditioning approvals of any "[...] legislative or adjudicative act [...] involving [...] the planning, use, or development of real property" (Government Code 65996[b]). Therefore, the proposed project, in combination with future development, would result in a less-than-significant cumulative impact related to the need for new, or improvements to existing, school facilities.

Parks and Recreation

The proposed project would include the provision of on-site parks and would not result in an increase in the use of existing neighborhood and community parks or other recreational facilities such that substantial physical deterioration of such facilities would occur or be accelerated. Future development would be required to either similarly provide on-site park uses, or per Section 3.20.070 of the Municipal Code, future development projects would be subject to all applicable fees as mandated by the City's Parks and Recreation Review Schedule, with payment of fees due upon application to the City for a building permit. Revenues generated through the Park Acquisition and Improvement Fees would be used to fund improvements to Parks and Recreation Facilities. Therefore, the proposed project, in combination with future development, would result in a less-than-significant cumulative impact related to parks and recreation.

Other Public Facilities

As discussed above, the SSJCPL maintains 13 branches to serve the residents of the County. Residents of future developments in the project vicinity would have access to the SSJCPL's Manteca Public Library, located at 320 West Center Street, approximately 2.45 miles to the northwest of the project site. While future development could result in increased demand for services offered by the SSJCPL, future residents would be subject to the County's Transactions and Use Tax For Countywide Library Programs and Operations. Per Section 3-2500 of the County's Code of Ordinances, the tax is imposed on retail transactions in the incorporated and unincorporated territories of the County. Revenues are then used exclusively for Countywide library programs and operations. Additionally, developers of future projects would be subject to the County's Facilities Fee (Section 9-1245.1 of the County Code of Ordinances), which is collected by the City prior to the issuance of a building permit, as detailed in Chapter VI. – Development Fees of the City's Fee Schedules. Payment of all applicable fees and taxes would ensure the proposed project, in combination with future development, results in a less-than-significant cumulative impact related to other public facilities.



Conclusion

Based on the above, the proposed project, in combination with future development occurring in the City's southeast communities, would result in a ***less-than-significant*** cumulative impact related to public services and recreation.

Mitigation Measure(s)

None required.

4.11-10 Increase in demand for utilities and service systems associated with the proposed project, in combination with future buildout of the City of Manteca. Based on the analysis below, the project's contribution to the cumulative impact is *less than significant*.

Potential cumulative impacts related to water supply; wastewater conveyance and treatment; storm drainage; electricity, natural gas, and telecommunications facilities; and solid waste disposal are discussed below.

Water Supply

Implementation of the proposed project, in combination with other development within the project vicinity, would result in increased demand for raw and potable water in the City. Land surrounding the project site on all sides is currently designated as LDR by the City's existing General Plan.

Consistent with Section 16.23.030 of the Municipal Code, which requires a subdivider to install a water system for the land division, together with such equipment, pipelines, and facilities as may be necessary to ensure the land division has an adequate supply of water for domestic and fire protection purposes, water would be provided to future residential communities in the project vicinity by way of new connections to the existing water infrastructure. As required by Section 13.38.040 of the Municipal Code, developers of future projects would be subject to the City's Water Development Fee to ensure payment of an equitable share of the cost of mitigating future water demands. Additionally, per Section 13.04.020 of the Municipal Code, developers would be subject to connection fees and capacity charges prior to connection of new water meters.

Additionally, as discussed under Impact 4.11-6, the total projected water supplies determined to be available to the City in normal, single dry, and multiple dry water years during a 20-year projection would meet the water demand associated with existing and planned future uses in the City. Based on the above, future development would be subject to fees associated with maintaining water services and the City would have enough water supplies to meet projected water demand. Therefore, the proposed project would result in a less-than-significant cumulative impact related to water supply.

Wastewater Conveyance and Treatment

As detailed under Impact 4.11-7, the City anticipates buildout of the General Plan to result in a total demand for wastewater flows of approximately 23 MGD, including



demand associated with existing development. The projected demand would be within the planned capacity of the WQCF, as the City has estimated that wastewater flows would have a buildout capacity of 27 MGD, with the City allocated 23 MGD and the City of Lathrop allocated the remaining four MGD. Costs associated with upgrades to the City's overall collection sewer strategy are identified in the PFIP at \$54,936,000. The City evaluates the PFIP fee structure on a continuous basis to assure that sufficient funds are generated from developments to pay for the various public improvements needed to provide wastewater treatment and collection services for the existing and increased population and commercial activities. Developers of future projects would be subject to PFIP fees related to the sanitary sewer system, which would be paid by way of the City's Sewer Facilities Development Fee. As such, PFIP fees would ensure the proposed project, in combination with future development, would result in a less-than-significant cumulative impact related to wastewater conveyance and treatment.

Storm Drainage

Stormwater facilities required for future development would be constructed consistent with City requirements, as specified in Section 16.23.030 of the Municipal Code. Storm drainage improvements that would serve future growth would be consistent with the City's PFIP. The PFIP includes all water, wastewater, storm drainage, and transportation facilities required to meet the City's targets for Level of Service. The PFIP ensures that infrastructure required for growth is constructed in a timely manner and financed in a way that equitably divides financial responsibility in proportion to the demands placed on new facilities. As part of ensuring payment of an equitable share of the cost of mitigating future storm drainage demands created by projects, per Section 13.38.060 of the Municipal Code, developers would be subject to the City's Storm Drainage Fee, assessed as part of the City's PFIP fees.

Based on the above information, the proposed project, in combination with future development, would comply with Municipal Code requirements for establishing connection to the City's storm drainage system and future demands created by the proposed project and future buildout of the General Plan would be addressed through payment of the Storm Drainage Fee. Therefore, the proposed project would result in a less-than-significant cumulative impact to the City's storm drainage system.

Electricity, Natural Gas, and Telecommunications Facilities

Environmental effects associated with the construction of new or expanded electricity, natural gas, and telecommunications facilities would primarily be project-specific, rather than cumulative. As noted under Impact 4.11-5, while the project would include new connections to existing electrical, natural gas, and telecommunications infrastructure located in the project vicinity, substantial extension of existing off-site infrastructure would not be required. Therefore, the proposed project would result in a less-than-significant cumulative impact related to construction of new or expanded electricity, natural gas, and telecommunications facilities.

Solid Waste

As noted previously, solid waste collection services for the proposed project would be provided by the City's Solid Waste Division, which collects solid waste throughout the City and deposits it at the Lovelace Solid Waste Transfer Station. Recyclable materials



are sorted at the Lovelace facility. Solid waste that is not recyclable is then transferred to other landfills in the area, including the Austin Road/Forward Landfill and the Forward, Inc. Landfill. Due to the substantial amount of available capacity remaining at the landfills serving the City, sufficient capacity would be available to accommodate the project's solid waste disposal needs as well as the needs of future development. Therefore, the proposed project would result in a less-than-significant cumulative impact related to solid waste disposal.

Conclusion

Based on the above, the proposed project would not result in any significant cumulative impacts related to water supply; wastewater conveyance and treatment; storm drainage; electricity, natural gas, and telecommunications facilities; or solid waste disposal. Thus, the proposed would result in a ***less-than-significant*** cumulative impact related to utilities and service systems.

Mitigation Measure(s)

None required.



4.12 TRANSPORTATION

4.12 TRANSPORTATION

4.12.1 INTRODUCTION

The Transportation chapter of the EIR discusses the existing transportation facilities within the project vicinity, as well as applicable policies and guidelines used to evaluate operation of such facilities. The information contained within this chapter is primarily based on the Transportation Analysis¹ prepared for the proposed project by Fehr & Peers (see Appendix K), as well as the City of Manteca General Plan² and the City of Manteca General Plan EIR.³

In response to the Notice of Preparation (NOP), the City received comments related to transportation regarding the potential for the proposed project to result in potential impacts related to cumulative traffic and roadway conditions; emergency vehicle access along Pillsbury Road; speeding; congestion on project vicinity roadways; indirect creation of through streets; traffic signals; semi-trucks on Moffat Boulevard; congestion entering and exiting State Route (SR) 99 and SR 120; the existing Union Pacific Railroad mainline crossings in the project vicinity; project construction; pedestrian and bicycle circulation; parking; and half-plex garages. The comments have been carefully reviewed and considered by the City of Manteca and are reflected in the analysis of impacts in this chapter.

Pursuant to the CEQA Guidelines, any project that did not initiate CEQA public review prior to July 1, 2020 must use vehicle miles traveled (VMT) rather than level of service (LOS) as the metric to analyze transportation impacts. Therefore, the analysis include in this chapter focuses on VMT. However, an analysis of LOS is available in the project-specific Transportation Analysis, and will be used by the City in the project review process for determining consistency with general plan and community plan goals and policies.

4.12.2 EXISTING ENVIRONMENTAL SETTING

The section below describes the physical and operational characteristics of the existing transportation system within the project area, including the surrounding roadway network, transit, bicycle, and pedestrian facilities.

Vehicle Miles Traveled

VMT is a measure of the total amount of vehicle travel occurring on a given roadway system. In 2013, Senate Bill (SB) 743 was passed to amend Sections 65088.1 and 65088.4 of the Government Code, amend Sections 21181, 21183, 21186, 21187, 21189.1, and 21189.3 of the Public Resources Code (PRC), to add Section 21155.4 to the PRC, to add Chapter 2.7 (commencing with Section 21099) to Division 13 of the PRC, to add and repeal Section 21168.6.6 of the PRC, and to repeal and add Section 21185 of the PRC, relating to environmental quality.

¹ Fehr & Peers. *Hat Ranch Project – Transportation Analysis*. July 19, 2022.

² City of Manteca. *City of Manteca General Plan 2023*. Updated May 19, 2016.

³ City of Manteca. *City of Manteca General Plan 2023 EIR*. October 6, 2003.



As a result of SB 743, local jurisdictions may not rely on vehicle LOS and similar measures related to delay as the basis for determining the significance of transportation impacts under CEQA. Thus, consistent with the CEQA Guidelines, VMT is the primary metric used to identify transportation impacts to roadway systems within this chapter.

The established Baseline VMT per single family household in the City of Manteca is 103.7 and the established Cumulative (2040) VMT per single family household in the City of Manteca is 83.0.

Pedestrian, Bicycle, and Transit Facilities

The sections below describe the existing pedestrian, bicycle, and transit facilities located within the vicinity of the project site.

Pedestrian and Bicycle Facilities

Figure 4.12-1 presents the existing bicycle and pedestrian network in the project area. As displayed, sidewalks are present along both the east and west sides of Pillsbury Road from Woodward Avenue to the north and Mono Street to the south. South of Mono Street, sidewalks are provided on the west side of Pillsbury Road to the northern boundary of the project site. On Main Street / Manteca Road, sidewalks are provided on the west side of the roadway from Woodward Avenue to south of Rina Drive. Immediately north and west of the project site, sidewalks are provided in the adjacent residential subdivisions and along internal roadways within those subdivisions.

Class II bike lanes are also present along segments of Mono Street, Tannehill Drive, Heartland Drive, Buena Vista Drive, Pear and Tree Street. Further north of the project site, Class I multi-use paths are provided on the north (east) side of Atherton Drive and west side of Wellington Avenue.

Transit System

Figure 4.12-2 presents the existing transit network in the study area. Manteca Transit operates a fixed-route and Dial-a-Ride bus service with stops throughout the City. Route 2 provides weekday fixed route service to the project site on eastbound Woodward Avenue.

The nearest stop is approximately 0.5-mile north of the proposed project and is located at the Woodward Community Park (near Wellington Avenue) and at the intersection of Woodward Avenue / Memorial Lane (west of Atherton Drive).

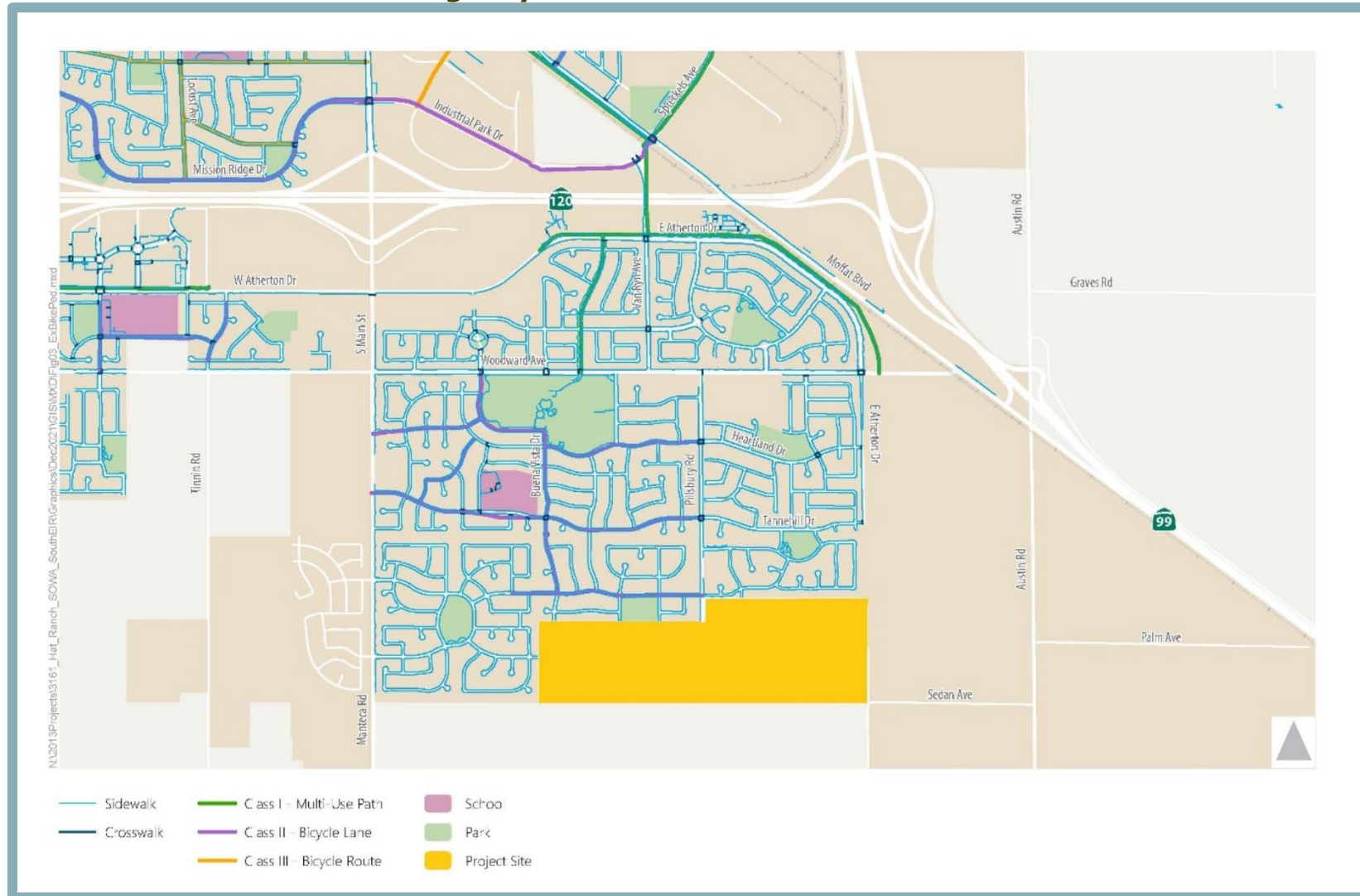
In addition to Manteca Transit, the San Joaquin Regional Transportation District provides both weekday and weekend service to the City via the Manteca Transit Center located at the south-east corner of the Main Street / Moffat Boulevard intersection. The San Joaquin Regional Transportation District offers service to Stockton, Tracy, Lathrop, Lodi, Ripon, and Escalon.

4.12.3 REGULATORY SETTING

Applicable federal laws or regulations pertaining to transportation and circulation within the project area do not exist. State and local laws and regulations applicable to the proposed project are listed below.



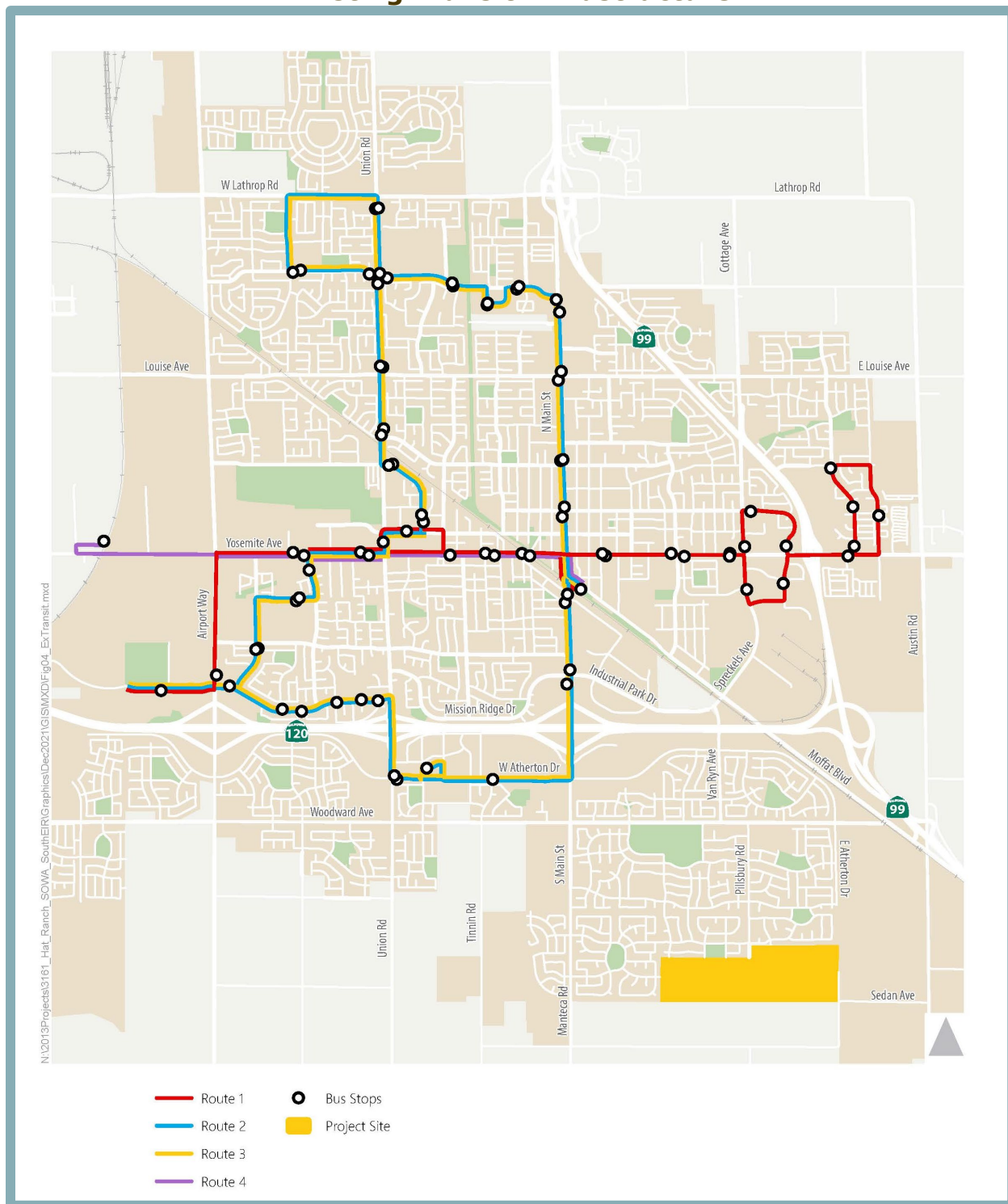
**Figure 4.12-1
Existing Bicycle and Pedestrian Infrastructure**



Source: Fehr and Peers, 2022.



**Figure 4.12-2
 Existing Transit Infrastructure**



Source: Fehr and Peers, 2022.



State Regulations

The following are the State environmental laws and policies relevant to transportation.

Senate Bill 743

SB 743 (Stats. 2013, ch. 386) requires the Governor's Office of Planning and Research (OPR) to establish new metrics for determining the significance of transportation impacts of projects within transit priority areas and allows OPR to extend use of the metric beyond transit priority areas (TPAs). In response, OPR released the *Technical Advisory on Evaluating Transportation Impacts in CEQA*, which identified VMT as the preferred transportation impact metric. OPR applied their discretion to require the use of VMT statewide. SB 743 requires that as of April 27, 2019, vehicle LOS and similar measures related to delay shall not be used as the sole basis for determining the significance of transportation impacts. Determination of impacts based on VMT is required Statewide as of July 1, 2020.

CEQA Guidelines Section 15064.3

Section 15064.3 of the CEQA Guidelines was added in 2018 to address the requirements of SB 743 and the OPR Technical Advisory on Evaluating Transportation Impacts in CEQA. Section 15064.3 states the following:

(a) Purpose.

This section describes specific considerations for evaluating a project's transportation impacts. Generally, vehicle miles traveled is the most appropriate measure of transportation impacts. For the purposes of this section, "vehicle miles traveled" refers to the amount and distance of automobile travel attributable to a project. Other relevant considerations may include the effects of the project on transit and non-motorized travel. Except as provided in subdivision (b)(2) below (regarding roadway capacity), a project's effect on automobile delay shall not constitute a significant environmental impact.

(b) Criteria for Analyzing Transportation Impacts.

- (1) Land Use Projects. Vehicle miles traveled exceeding an applicable threshold of significance may indicate a significant impact. Generally, projects within one-half mile of either an existing major transit stop or a stop along an existing high quality transit corridor should be presumed to cause a less than significant transportation impact. Projects that decrease vehicle miles traveled in the project area compared to existing conditions should be presumed to have a less than significant transportation impact.
- (2) Transportation Projects. Transportation projects that reduce, or have no impact on, vehicle miles traveled should be presumed to cause a less than significant transportation impact. For roadway capacity projects, agencies have discretion to determine the appropriate measure of transportation impact consistent with CEQA and other applicable requirements. To the extent that such impacts have already been adequately addressed at a programmatic level, such as in a regional transportation plan EIR, a lead agency may tier from that analysis as provided in Section 15152.
- (3) Qualitative Analysis. If existing models or methods are not available to estimate the vehicle miles traveled for the particular project being considered, a lead agency may analyze the project's vehicle miles traveled qualitatively. Such a qualitative analysis would evaluate factors such as the availability of transit,



proximity to other destinations, etc. For many projects, a qualitative analysis of construction traffic may be appropriate.

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

(c) Applicability.

The provisions of this section shall apply prospectively as described in section 15007. A lead agency may elect to be governed by the provisions of this section immediately. Beginning on July 1, 2020, the provisions of this section shall apply statewide.

Technical Advisory on Evaluating Transportation Impacts in CEQA

The OPR's Technical Advisory on Evaluating Transportation Impacts in CEQA includes potential significance thresholds for different types of land use projects and transportation projects. Distinct threshold recommendations are provided for residential, office, and retail projects. Such uses tend to have the greatest influence on VMT. Lead agencies, using more location-specific information, may develop their own more specific thresholds, which may include other land use types. In developing thresholds for other project types, the Technical Advisory directs lead agencies to consider the purposes described in Section 21099 of the PRC and regulations in the CEQA Guidelines on the development of thresholds of significance (e.g., CEQA Guidelines Section 15064.7).

The Technical Advisory suggests that lead agencies may screen out VMT impacts using project size, map-based approaches to low-VMT areas, transit availability, and provision of affordable housing.

California Department of Transportation

The California Department of Transportation (Caltrans) is responsible for planning, designing, constructing, operating, and maintaining all state-owned roadways, in California, including those in San Joaquin County and the City of Manteca. Federal highway standards are implemented in California by Caltrans. Any improvements or modifications to the State highway system within the County need to be approved by Caltrans. The City does not have the ability to unilaterally make improvements to the State highway system. Caltrans' *Guide for the Preparation of Traffic Impact Studies* (December 2002) provides guidance on the evaluation of traffic impacts to State highway facilities. The document outlines when a traffic impact study is needed and what should be included in the scope of the study. The following provides a discussion of reports published by Caltrans which are applicable to the proposed project.

Vehicle Miles Traveled-Focused Transportation Impact Study Guide

In May 2020, Caltrans published the Vehicle Miles Traveled-Focused Transportation Impact Study Guide (TISG), which replaced the Caltrans 2002 Guide for the Preparation of Traffic



Impact Studies. The TISG generally endorses the policies, technical approaches, and recommendations from OPR's Technical Advisory. The TISG also indicates that Caltrans intends to "transition away from requesting LOS or other vehicle operations analyses of land use projects", instead placing the focus on VMT and safety.

As a follow-up to the TISG, Caltrans published the Interim Land Development and Intergovernmental Review (LDIGR) Safety Review Practitioners Guidance in July 2020 which provides interim guidance for conducting safety reviews of land use projects and plans that may affect the State Highway System. Although the LDIGR Safety Review Practitioners Guidance stops short of including specific thresholds of significance or providing recommendations for how safety evaluations should be included in CEQA documents, the document clearly indicates the State's expectation that, when appropriate, CEQA studies of land use projects should include safety investigations of the State Highway System. Furthermore, the LDIGR specifies that mitigation measures for identified safety impacts should avoid increasing roadway capacity, which may induce VMT or affect conditions for vulnerable users, such as bicyclists or pedestrians.

Local Regulations

The following are the local environmental policies relevant to transportation.

SJCOG RTP/SCS

The San Joaquin Council of Governments (SJCOG) is a joint-powers authority comprised of the County of San Joaquin and the cities of Stockton, Lodi, Manteca, Tracy, Ripon, Escalon, and Lathrop which was established in 1968. In June 2018, SJCOG adopted the 2018 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS), which provides a "sustainability vision" through the year 2042.⁴ As the region's comprehensive long-range transportation planning document, the RTP/SCS serves as a guide for achieving public policy decisions that will result in balanced investments for a wide range of multimodal transportation improvements. In general, the RTP/SCS includes 27 strategies that are intended to guide transportation planning.

City of Manteca General Plan 2023

The following are the goals and policies related to transportation, traffic, and circulation from the Manteca General Plan that are applicable to the proposed project.

Circulation Element

The Circulation Element of the General Plan was adopted in April 5, 2011.

Policy C-P-4	Streets shall be dedicated, widened, extended, and constructed according to street cross-section diagrams established in the City Standard Plans.
Policy C-P-5	Major circulation improvements shall be completed as abutting lands develop or redevelop, with dedication of right-of-way and construction of improvements, or

⁴ San Joaquin Council of Governments. 2018 *Regional Transportation Plan/Sustainable Communities Strategy*. Adopted June 2018.



	participation in construction of such improvements, required as a condition of approval.
Policy C-P-8	Street improvements will be designed to provide multiple, direct and convenient routes for all modes.
Policy C-P-9	Residential and collector street intersections with collector and arterial streets shall be aligned with other residential and collector streets, where feasible, to maintain a high degree of connectivity between neighborhoods, minimize circuitous travel, and to allow bicyclists and pedestrians to travel conveniently and safely from one neighborhood to another without using major streets.
Policy C-P-10	Access for bicycles and pedestrians shall be provided at the ends of cul-de-sacs, where right-of-way is available, to provide convenient access within and between neighborhoods and to encourage walking and bicycling to neighborhood destinations.
Policy C-P-11	Signals, roundabouts, traffic circles and other traffic management techniques shall be applied at residential and collector street intersections with collector and arterial streets in order to allow bicyclists and pedestrians to travel conveniently and safely from one neighborhood to another.
Policy C-P-14	The City may allow development of private streets in new residential projects that demonstrate the ability to facilitate police patrol, emergency access, and solid waste collection as well as fund on-going maintenance.
Policy C-P-15	The City shall promote infill development that completes gaps in the circulation system.
Policy C-P-20	The creation or continuance of traffic, bicycle, and pedestrian hazards shall be discouraged in new development, infill development, and redevelopment areas.
Policy C-P-21	In the development of new projects, the City shall give special attention to maintaining/ensuring adequate corner-sight distances appropriate for the speed and type of facility, including intersections of city streets and private access drives and roadways.
Policy C-P-22	The City shall encourage the development of landscape separated sidewalks along roadways (particularly arterials and non-residential streets) when feasible to discourage pedestrian/vehicle conflicts and be consistent with complete streets concepts.



Policy C-P-24	New development shall provide an adequate number of off-street parking spaces to accommodate the typical parking demands of the type of development on the site. The City may dictate both minimum and maximum amounts of parking; the use of shared parking is encouraged to reduce overall land consumed by parking areas. In the Downtown area, parking supply and demand will be managed through a coordinated approach led by the City.
Policy C-P-32	The City shall strive to provide on-street Class II bike lanes along major collector and arterial streets whenever feasible.
Policy C-P-33	Bicycle travel through residential streets shall be facilitated as much as possible without the use of Class II bike lanes. In general, residential streets have sufficiently low volumes as to not require bike lanes and the narrower street cross section will assist in calming traffic.
Policy C-P-35	Improve safety conditions, efficiency, and comfort for bicyclists and pedestrians by providing shade trees and controlling traffic speeds by implementing narrow lanes on appropriate streets.
Policy C-P-36	City shall strive to provide a sidewalk system that serves all members of the community and meets the latest guidelines related to the Americans with Disabilities Act (ADA).
Policy C-P-37	All new sidewalks, walkways, and intersection crosswalks shall be consistent with the requirements of the ADA.
Policy C-P-38	Provide walkways connecting to the residential neighborhoods and primary public destinations.
Policy C-P-39	Route sidewalks so that they connect to major public parking areas, transit stops, and intersections with the bikeway system.
Policy C-P-40	Provide sidewalks along all new streets in the City.
Policy C-P-45	Encourage programs that provide ridesharing and vanpool opportunities and other alternative modes of transportation for Manteca residents.
Policy C-P-48	The City shall design future roadways to accommodate transit facilities, as appropriate. These design elements would include installation of transit stops adjacent to intersections and provision of bus bays and sheltered stops.



It is noted that the General Plan Update includes several policies related to VMT. However, the City's General Plan Update has not yet been adopted.

City of Manteca Active Transportation Plan

The City of Manteca Active Transportation Plan was adopted on September 1, 2020.⁵ The goals and objectives included in the plan were developed with consideration of other local and state plans and policies, including the City's General Plan and the SJCOG RTP/SCS. The four primary goals established in the Active Transportation Plan are as follows:

1. Allow all users to move safely on City bicycle and pedestrian networks.
2. Develop convenient, low-stress bicycle and pedestrian networks that connect Manteca residents and visitors to destinations in the City and other jurisdictions.
3. Ensure bicycle and pedestrian networks are well-maintained.
4. Increase bicycling and walking in Manteca to support improved public health and reduce chronic diseases related to inactivity, increased economic activity along commercial corridors, improved air quality, and reduced greenhouse gas production.

In order to achieve the foregoing goals, the Active Transportation Plan identifies planned pedestrian and bicycle networks, as well as general improvements to existing infrastructure.

Measure K

Measure K refers to the sales tax that is applied in San Joaquin County and used for funding transportation projects. Measure K was first approved in 1990, and was renewed in November 2006. By the year 2041, Measure K is estimated to deliver an additional \$2.552 billion worth of transportation improvements to the region. Major improvements target San Joaquin County freeways, streets and roads, public transit networks, pedestrian, and bicycle friendly programs.⁶

4.12.4 IMPACTS AND MITIGATION MEASURES

This section describes the standards of significance and methodology utilized to analyze and determine the proposed project's potential impacts related to transportation and circulation.

Standards of Significance

Consistent with Appendix G of the CEQA Guidelines, the proposed project would be considered to result in a significant adverse impact on the environment in relation to transportation and circulation if the project would result in any of the following:

- Conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities;
- Conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b);
- Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment); or
- Result in inadequate emergency access.

⁵ City of Manteca. *Active Transportation Plan*. August 2020.

⁶ San Joaquin Council of Governments, California. *Measure K*. Available at: <https://www.sjcog.org/300/Measure-K>. Accessed May 2022.



Method of Analysis

The information contained within this chapter is primarily based on the Transportation Analysis prepared for the proposed project by Fehr & Peers (Appendix K). The methodologies employed for the technical study are summarized below.

Vehicle Trip Generation and Distribution

Table 4.12-1 presents the vehicle trips generated by the proposed project. As shown in the table, because the project would include both single-family dwelling units and a K-8 school, a reduction has been applied for school-related trips to represent students walking or biking to school and to represent parents dropping off and picking up students on their way to work or other activities (i.e., a linked vehicle trip).

Table 4.12-1 Hat Ranch Project Trip Generation Analysis								
Land Use	Quantity ¹	Daily	AM Peak			PM Peak		
			In	Out	Total	In	Out	Total
Single-Family Detached Housing (ITE Land Use Code 210)	739 DU	6,976	548	134	414	732	466	266
Ripon Unified School District K-8 School Site (ITE Land Use Code 520)	675 students	1,316	439	236	203	115	54	61
Reduction for School Related Trips (Walk, Bike and Linked Trips)		-855	-855	-285	-153	-132	-75	-35
Net New Vehicle Trip Generation		7,437	7,437	702	217	485	772	485
¹ The number of dwelling units assumed for development of the project site in the trip generation analysis is based on the previously proposed total of 739 dwelling units. The currently proposed project would result in 738 dwelling units. However, as the analysis assumed a slightly higher total, the analysis provides a more conservative evaluation. Trip generation is based on trip rates published in <i>Trip Generation Manual 10th Edition</i> (Institute of Transportation Engineers, 2017).								
Source: Fehr & Peers, 2022.								

Study Scenarios

The following study scenarios are evaluated in this chapter:

- **Existing Conditions** – Analyzes operations as they existed at the time of the environmental baseline (at the release of the NOP).
- **Existing Plus Project Conditions** – Analyzes existing operations with the addition of trips generated from the proposed project.
- **Cumulative Conditions** - Analyzes Cumulative Year (2040) volumes, assuming the project area remains in its current state with a single 20,000-sf residential unit.
- **Cumulative Plus Project Conditions** – Analyzes Cumulative Year (2040) volumes with the addition of trips generated from the proposed project.



Under the Cumulative and Cumulative Plus Project Conditions, the following improvements are assumed to have occurred. Such improvements have programs in place and, therefore, are considered reasonably foreseeable.

- **SR 120 / SR 99 Interchange Project:** The City of Manteca, Caltrans District 10, and SJCOG are working together to improve the existing freeway-to-freeway interchange. This improvement will add an additional lane to increase capacity on two connector ramps (eastbound SR 120 to southbound SR 99 and from northbound SR 99 to westbound SR 120), add auxiliary lanes on SR 99 and 120 to improve merging traffic movements, upgrade the existing interchange ramps at Austin Road, replace the Austin Road structure over SR 99 with a four-lane structure over both SR 99 and UPRR, remove the existing at-grade crossing of the UPRR tracks at Austin Road, construct a new connector road from Austin Road to Woodward to Moffat Boulevard, widen the existing Woodward Avenue gated railroad crossing, and install new improvements at the following intersections:
 - Woodward Avenue / Moffat Boulevard;
 - SR 99 SB Off-Ramp / Moffat Boulevard;
 - Austin Road / SR 99 NB Ramps; and
 - Betschart Drive / Atherton Drive.
- **Public Facilities Implementation Plan (PFIP) Improvements:** Intersection lane configurations and traffic controls identified in the City of Manteca PFIP, including modifications to the following intersections:
 - Woodward Avenue / Main Street;
 - Woodward Avenue / Atherton Drive;
 - Main Street / Atherton Drive;
 - Antone Raymus Parkway / Manteca Road (Main Street);
 - Antone Raymus Parkway / Atherton Drive; and
 - Antone Raymus Parkway / Austin Road.
- **SR 120 / Main Street Interchange:** Appendix F of the SJCOG RTP/SCS indicates reconstruction of the SR 120 / Main Street Interchange.

City of Manteca General Plan Update Travel Forecasting Model

Fehr & Peers developed an Interim General Plan Year 2040 Travel Forecasting Model (TFM) for the City of Manteca, which encompasses the developments in adjacent areas, including the cities of Lathrop and Ripon. The General Plan Update TFM includes two model scenarios: Base Year TFM and Cumulative Year 2040 TFM.

The Base Year TFM incorporates base year land use data for residential dwelling units and employment (food, retail, office, industrial, medical, government, and school), as well as the roadway network (lanes, speed, capacity class), based on 2019 data. The trip generation rates were derived from the Institute of Transportation Engineer's Trip Generation Manual and include appropriate inbound/outbound trip generation rates for residential and employment land uses for AM and PM peak hour conditions.

The Cumulative Year 2040 TFM was developed based on expected future land uses and the transportation network for the City of Manteca and adjacent areas, including the City of Lathrop, in 2040. The City of Manteca 2040 land use inputs were developed based on the projects that are approved and/or anticipated to be constructed and occupied by year 2040. The City of Lathrop's 2040 land use inputs were developed based on the City's historic rate of growth in



households and employment for the five-year period from 2016 to 2020. The Cumulative Year 2040 TFM also considers projects identified in the City of Manteca PFIP and the SJCOG RTP/SCS, including mainline highway improvements, interchange improvements, and regional roadway improvements. It is noted that the three major categories of infrastructure projects rely on a combination of regional Measure K and local PFIP funds and are not yet fully funded.

VMT Analysis Methodology

The OPR *Technical Advisory On Evaluating Transportation Impacts in CEQA* recommends that lead agencies establish project-level thresholds for VMT analysis. Per Section 15064.3(b)(3) of the CEQA Guidelines, a lead agency has discretion to choose the most appropriate methodology to evaluate a project's VMT, including whether to express the change in absolute terms, per capita, per household or in any other measure. Where appropriate, a lead agency may analyze a project's VMT qualitatively based on the availability of transit, proximity to destinations, etc. Existing guidance available in the *Technical Advisory On Evaluating Transportation Impacts in CEQA* includes recommended numeric thresholds for residential, office, and retail projects.

The OPR Technical Advisory states that lead agencies may develop their own specific thresholds, which may include other land use types, using more location-specific information. Therefore, the City has considerable discretion in choosing a suitable VMT impact analysis approach for the purposes of the proposed project. A proposed residential development would result in a significant transportation impact if it would:

1. Generate vehicle travel exceeding 15 percent below the established baseline VMT under existing (baseline) or cumulative conditions; or
2. Result in an increase in total VMT in the model area.

The Base Year TFM developed for the General Plan Update was used to develop Baseline Average Weekday Daily home-based VMT per single family household. The Base Year TFM was also used to develop trip distribution under Existing Plus Project Conditions. Baseline home-based VMT was calculated by taking the total home-based VMT generated by all households of the same housing category (single-family, multi-family, or age-restricted) in the City of Manteca and dividing the VMT by the total number of households in the respective housing category.

The Cumulative Year 2040 TFM was used to estimate the Development Area's Cumulative Average Weekday Daily VMT. Cumulative City of Manteca average home-based VMT was calculated by taking the total home-based VMT generated by all households of the same housing category in the City under Cumulative Conditions and dividing the VMT by the total number of households in the respective housing category under Cumulative Conditions.

Project-Specific Impacts and Mitigation Measures

The following discussion of impacts related to transportation is based on implementation of the proposed project in comparison to existing conditions and the standards of significance presented above.



4.12-1 Conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities. Based on the analysis below, the impact is *less than significant*.

The following discussions evaluate whether the proposed project would result in impacts to existing or planned pedestrian, bicycle, or transit facilities and services within the project vicinity.

Pedestrian and Bicycle Facilities

Per the City's Active Transportation Plan, a Class II bike lane is planned south of the project site, along Antone Raymus Parkway. Consistent with such, Antone Raymus Parkway would include marked bike lanes as well as separated eight-foot-wide sidewalks. All interior roadways would include paved sidewalks to facilitate pedestrian activity.

The proposed project would include bicycle and pedestrian improvements consistent with those required in the Active Transportation Plan. Thus, the proposed project would improve the pedestrian and bicycling environment and would not create an inconsistency with planned improvements in the project vicinity. Therefore, project impacts related to pedestrian and bicycle facilities are considered less than significant.

Transit Facilities

As discussed previously, the nearest bus stop to the project site is located approximately 0.5-mile north of the proposed at the Woodward Community Park and at the intersection of Woodward Avenue / Memorial Lane. As a result, future residents of the proposed project would have access to existing transit facilities. In addition, implementation of the proposed project would not conflict with or interfere with existing or planned transit facilities. Therefore, the proposed project's impacts related to transit facilities are considered less than significant.

Conclusion

Based on the above, the proposed project would not conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities under Existing Plus Project Conditions, and a ***less-than-significant*** impact would occur.

Mitigation Measure(s)

None required.

4.12-2 Conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b), during Existing Plus Project Conditions. Based on the analysis below, and with the implementation of mitigation, the impact is *significant and unavoidable*.



Section 15064.3 of the CEQA Guidelines states that generally, VMT is the most appropriate measure for evaluating the transportation impacts of a project. Per Section 15064.3(b), VMT exceeding an applicable threshold of significance may indicate a significant impact. For the purposes of this analysis, the proposed project would result in a significant impact under Existing Plus Project Conditions if it were to generate VMT per single family household exceeding 88.1 (15 percent below the established baseline VMT of 103.7).

Table 4.12-2 presents the VMT per single-family residential household under Existing Conditions as compared to the VMT per household under Existing Plus Project Conditions. As shown in the table, the proposed project would generate an estimated average of 114.6 VMT per single-family household, which represents an approximately 10 percent increase from the Existing Conditions VMT. As such, the proposed project would generate vehicle travel exceeding 15 percent below the established baseline, and a **significant** impact could occur.

Table 4.12-2			
VMT Analysis – Existing Plus Project Conditions			
Existing Conditions VMT Per Single Family Household	Existing Plus Project Conditions VMT Per Single Family Household	Change in VMT (miles)	Change in VMT (%)
103.7	114.6	+10.9	+10 %
<i>Source: City of Manteca Travel Demand Model - Fehr & Peers, 2022.</i>			

Mitigation Measure(s)

Implementation of the following mitigation measure would reduce the above potential impact.

4.12-2 *Prior to issuance of a certificate of occupancy, transportation demand management measures shall be implemented to the maximum extent feasible, subject to the approval of the City of Manteca Planning Department. Potential transportation demand management measures include, but are not limited to:*

- *Increase residential density;*
- *Limit residential parking supply;*
- *Improve street connectivity;*
- *Provide ride-share program;*
- *Implement subsidized or discounted transit program;*
- *Provide bicycle facilities at the proposed school;*
- *Provide community-based travel planning;*
- *Provide pedestrian network improvement;*
- *Construct or improve bike facility;*
- *Construct or improve bike boulevard;*
- *Expand bikeway network;*
- *Implement conventional or electric carshare program;*
- *Implement pedal or electric bikeshare program;*
- *Implement scooter-share program;*



- *Extend transit network coverage or hours;*
- *Increase transit service frequency;*
- *Implement transit-supportive roadway treatments; and*
- *Reduce transit fares.*

Level of Significance Following Mitigation

Transportation Demand Management (TDM) strategies are designed to increase the transportation system efficiency and reduce vehicle demand on the multi-modal transportation system. Common TDM strategies are based on discouraging single-occupancy vehicle travel; encouraging transit, carpools, and active modes of travel (i.e., bicycling, walking, scooter); shifting travel patterns from congested peak to less congested off-peak hours, and proximity to closer complimentary destinations. However, the biggest effect of TDM strategies on VMT derive from regional policies related to land use location efficiency, jobs/housing/activity balance, and infrastructure investments that support transit, walking, and bicycling. Of these strategies, only a few are likely to be effective in a suburban or rural setting such as the City of Manteca. Thus, given the suburban land use context of the City, the effectiveness of TDM measures cannot be guaranteed to reduce the project VMT or total VMT impacts to a less-than-significant level. Therefore, the impact would remain *significant and unavoidable*.

4.12-3 Substantially increase hazards to vehicle safety due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment) or result in inadequate emergency access. Based on the analysis below, the impact is *less than significant*.

The project would not include the installation of any sharp curves or dangerous intersections. In addition, given the proposed land uses, the use of incompatible equipment would not occur. Farming does occur in the area south of the project site and, as a result, farming equipment may occasionally operate on roadways in the project area. However, implementation of the proposed project would not increase the use of farming equipment or exacerbate hazardous conditions that may be caused by the use of farm equipment operating on roadways. During construction, equipment would be staged on-site. Furthermore, the project site is not located in a central area of the City, and construction on the project site would not be anticipated to result in substantial road closures or otherwise interfere with citywide vehicle circulation. As a result, impacts related to hazards and vehicle safety due to a geometric design feature would not occur.

Several factors determine whether a project has sufficient access for emergency vehicles, including the following:

- Number of access points (both public and emergency access only);
- Width of access points; and
- Width of internal roadways.



Primary access to the project site would be provided by the following six access intersections:

1. Antone Raymus Parkway / Project Intersection #1 (all-way stop controlled);
2. Antone Raymus Parkway / Project Intersection #2 (all-way stop controlled);
3. Antone Raymus Parkway / Project Intersection #3 (all-way stop controlled);
4. Project Intersection #4 / Atherton Drive (all-way stop controlled);
5. Project Intersection #5 / Pillsbury Road (all-way stop controlled); and
6. Project Intersection #6 / Pillsbury Road (all-way stop controlled).

Access would be provided internally by Polk Street, Buena Vista Drive, Inyo Avenue, and Jigsaw Avenue, which connect to the subdivision to the west and northwest. Access would also be provided internally by Veramonte Avenue, which connects to the subdivision to the northeast. Therefore, several access points exist to provide emergency access and/or emergency evacuation routes. The primary entrance to the project site from Pillsbury Road would be 50 feet wide, and all internal roadways would be at least 36 feet wide, which would adequately accommodate emergency vehicles. Furthermore, according to the Transportation Analysis, adequate emergency access would be provided, and geometric hazards would not exist on-site.

It should be noted that with respect to potential safety impacts that could occur as a result of the proposed project related to the UPRR tracks parallel to Moffat Boulevard in the project vicinity, the existing UPRR track crossings located nearest to the project site are along Woodward Avenue and Austin Road. Each crossing currently consists of crossing arms and lights to warn drivers of an approaching train. Neither are located along roadways that provide short driver sight distance of the crossing. The proposed project would not result in changes to either crossing. Therefore, project-generated traffic would not result in safety impacts associated with the existing UPRR track crossings along Woodward Avenue and Austin Road.

Therefore, the proposed development project would not conflict with any program, plan, ordinance, or policy addressing the circulation system, substantially increase hazards due to a geometric feature, or result in inadequate emergency access. These impacts would be ***less than significant***.

Mitigation Measure(s)

None required.

Cumulative Impacts and Mitigation Measures

As defined in Section 15355 of the CEQA Guidelines, “cumulative impacts” refers to two or more individual effects which, when considered together, are considerable, compound, or increase other environmental impacts. The individual effects may be changes resulting from a single project or a number of separate projects. The cumulative impact from several projects is the change in the environment that results from the incremental impact of the project when added to other closely related past, present, and reasonably foreseeable probable future projects.



The cumulative setting for this analysis is based on expected future land uses and the transportation network for the City of Manteca and adjacent areas, including the City of Lathrop, in 2040. The City of Manteca 2040 land use inputs were developed based on the projects that are approved and/or anticipated to be constructed and occupied by year 2040. The City of Lathrop's 2040 land use inputs were developed based on the City's historic rate of growth in households and employment for the five-year period from 2016 to 2020. The Cumulative Year 2040 TFM also considers projects identified in the City of Manteca PFIP and the SJCOG RTP/SCS, including mainline highway improvements, interchange improvement, and regional roadway improvements.

As noted previously, project-specific impacts related to pedestrian, bicycle, and transit facilities, increased hazards, or inadequate emergency access would be less-than-significant. Therefore, cumulative impacts related to such are not further evaluated at the cumulative level. The cumulative analysis presented herein focuses on VMT impacts associated with the proposed project.

4.12-4 Conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b), during Cumulative Plus Project Conditions. Based on the analysis below, and with the implementation of mitigation, the impact is *significant and unavoidable*.

Table 4.12-3 presents the projected Cumulative Conditions VMT per single family residential household and the proposed project VMT per household.

Table 4.12-3 VMT Analysis – Cumulative Plus Project Conditions			
Cumulative Conditions VMT Per Single Family Household	Cumulative Plus Project Conditions VMT Per Single Family Household	Change in VMT (miles)	Change in VMT (%)
77.7	83.0	+5.3	+6.8%
<i>Source: City of Manteca Travel Demand Model - Fehr & Peers, 2022.</i>			

As shown in the table, the proposed project would generate an estimated average of 83.0 VMT per single family household under Cumulative Plus Project Conditions, which represents an approximately 6.8 percent increase from Cumulative VMT conditions. As such, the proposed project would generate vehicle travel exceeding 15 percent below the established baseline, and a **significant** impact could occur.

Mitigation Measure(s)

Implementation of the following mitigation measure would reduce the above potential impact.

4.12-4 *Implement Mitigation Measure 4.12-2.*



Level of Significance Following Mitigation

As noted previously, citywide VMT can be reduced through the implementation of TDM actions. However, because the effectiveness of TDM measures cannot be guaranteed to reduce the project VMT or total VMT impacts to a less-than-significant level, the impact would remain *significant and unavoidable*.



5. ALTERNATIVES ANALYSIS

5. ALTERNATIVES ANALYSIS

5.1 INTRODUCTION

The Alternatives Analysis chapter of the EIR includes consideration and discussion of a range of reasonable alternatives to the proposed project, as required per CEQA Guidelines Section 15126.6. Generally, the chapter includes discussions of the following: the purpose of an alternatives analysis; a reasonable range of project alternatives and their associated impacts in comparison to the proposed project's impacts; and the environmentally superior alternative.

5.2 CEQA REQUIREMENTS FOR ALTERNATIVES ANALYSIS

The primary intent of the alternatives evaluation in an EIR, as stated in Section 15126.6(a) of the CEQA Guidelines, is to "[...] describe a range of reasonable alternatives to the project, or to the location of the project, which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project, and evaluate the comparative merits of the alternatives." In the context of CEQA Guidelines Section 21061.1, "feasible" is defined as:

[...] capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, legal, social and technological factors.

Section 15126.6(f) of CEQA Guidelines states, "The range of alternatives required in an EIR is governed by a "rule of reason" that requires the EIR to set forth only those alternatives necessary to permit a reasoned choice." Section 15126.6(f) of CEQA Guidelines further states:

The alternatives shall be limited to ones that would avoid or substantially lessen any of the significant effects of the project. Of those alternatives, the EIR need examine in detail only the ones that the lead agency determined could feasibly attain most of the basic objectives of the project.

In addition, an EIR is not required to analyze alternatives when the effects of the alternative "cannot be reasonably ascertained and whose implementation is remote and speculative."

The CEQA Guidelines provide the following guidance for discussing alternatives to a proposed project:

- An EIR shall describe a range of reasonable alternatives to the project, or to the location of the project, which would feasibly attain most of the basic objectives of the project, but would avoid or substantially lessen any of the significant effects of the project, and evaluate the comparative merits of the alternatives (CEQA Guidelines Section 15126.6[a]).
- Because an EIR must identify ways to mitigate or avoid the significant effects that a project may have on the environment (Public Resources Code Section 21002.1), the discussion of alternatives shall focus on alternatives to the project or its location which are capable of avoiding or substantially lessening any significant effects of the project, even if these



alternatives would impede to some degree the attainment of the project objectives, or would be more costly (CEQA Guidelines Section 15126.6[b]).

- The EIR should briefly describe the rationale for selecting the alternatives to be discussed. The EIR should also identify any alternatives that were considered by the lead agency but were rejected as infeasible during the scoping process and briefly explain the reasons underlying the lead agency's determination [...] Among the factors that may be used to eliminate alternatives from detailed consideration in an EIR are: (i) failure to meet most of the basic project objectives, (ii) infeasibility, or (iii) inability to avoid significant environmental impacts (CEQA Guidelines Section 15126.6[c]).
- The EIR shall include sufficient information about each alternative to allow meaningful evaluation, analysis, and comparison with the proposed project. A matrix displaying the major characteristics and significant environmental effects of each alternative may be used to summarize the comparison (CEQA Guidelines Section 15126.6[d]).
- If an alternative would cause one or more significant effects in addition to those that would be caused by the project as proposed, the significant effects of the alternative shall be discussed, but in less detail than the significant effects of the project as proposed (CEQA Guidelines Section 15126.6[d]).
- The specific alternative of "no project" shall also be evaluated along with its impact. The purpose of describing and analyzing a no project alternative is to allow decision-makers to compare the impacts of approving the proposed project with the impacts of not approving the proposed project. The no project alternative analysis is not the baseline for determining whether the proposed project's environmental impacts may be significant, unless it is identical to the existing environmental setting analysis which does establish that baseline (CEQA Guidelines Section 15126.6[e][1]).
- If the environmentally superior alternative is the "no project" alternative, the EIR shall also identify an environmentally superior alternative among the other alternatives (CEQA Guidelines Section 15126.6[e][2]).

Project Objectives

Based on the above, reasonable alternatives to the project must be capable of feasibly attaining most of the basic objectives of the project. The following objectives have been submitted by the project applicant:

1. Establish a 184.7-acre, well-planned community, which incorporates 152.4 acres of Low-Density Residential Land to accommodate approximately 634 single-family homes and 104 half-plex units, a 16.1-acre elementary/middle school site, and two neighborhood parks totaling 16.2 acres.
2. Design a land use plan with uses complementary to existing surrounding Low Density Residential neighborhoods and in symmetry with the larger Manteca community including approximately 634 single-family homes and 104 half-plex units.
3. Provide housing opportunities responsive to the needs of Manteca, the region and market conditions, to serve a range of family incomes and household types.
4. Provide a pedestrian-friendly community that provides connections and access between the existing communities and Hat Ranch to the recreational areas within the public parks within the project.
5. Provide a land use plan, design standards, and guidelines consistent with Manteca General Plan goals and policies for Low Density Residential neighborhoods, incorporate market-acceptable design features, and foster an attractive, well-maintained community.



6. Establish a land use and circulation system that promotes convenient mobility, completes the extension of Pillsbury Road to Antone Raymus Parkway, and provides a setting that is safe, accessible, and convenient for all modes of travel.
7. Provide offsite improvements for Atherton Drive and Antone Raymus Parkway to complete the circulation routes as planned in the Circulation Element of the City of Manteca's General Plan.
8. Provide a comprehensive infrastructure system, including parks, open space, storm water quality facilities, roadways, and utilities infrastructure sized to serve the project and adjacent properties.

5.3 SELECTION OF ALTERNATIVES

The requirement that an EIR evaluate alternatives to the proposed project or alternatives to the location of the proposed project is a broad one; the primary intent of the alternatives analysis is to disclose other ways that the objectives of the project could be attained, while reducing the magnitude of, or avoiding, one or more of the significant environmental impacts of the proposed project. Alternatives that are included and evaluated in the EIR must be feasible alternatives. However, the CEQA Guidelines require the EIR to "set forth only those alternatives necessary to permit a reasoned choice." As stated in Section 15126.6(a), an EIR need not consider every conceivable alternative to a project. Rather it must consider a reasonable range of potentially feasible alternatives that will foster informed decision making and public participation. The CEQA Guidelines provide a definition for "a range of reasonable alternatives" and thus limit the number and type of alternatives that may need to be evaluated in a given EIR. According to the CEQA Guidelines Section 15126.6(f):

The alternatives shall be limited to ones that would avoid or substantially lessen any of the significant effects of the project. Of those alternatives, the EIR need examine in detail only the ones that the lead agency determined could feasibly attain most of the basic objectives of the project.

First and foremost, alternatives in an EIR must be feasible. As discussed above, in the context of CEQA Guidelines Section 21061.1, "feasible" is defined as "capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, legal, social and technological factors." Finally, an EIR is not required to analyze alternatives when the effects of the alternative "cannot be reasonably ascertained and whose implementation is remote and speculative."

Alternatives Considered But Dismissed From Further Analysis

Consistent with CEQA, primary consideration was given to alternatives that could reduce significant impacts, while still meeting most of the basic project objectives. Any alternative that would have impacts identical to or more severe than the proposed project, and/or that would not meet any or most of the project objectives were dismissed from further consideration. The alternatives considered but dismissed from further analysis in this Draft EIR are discussed below.

One alternative, the Off-Site Alternative, was considered but dismissed. The major characteristics of the Off-Site Alternative are summarized below.



Off-Site Alternative

Section 15126.6(f)(2)(B) of the CEQA Guidelines states, “If the lead agency concludes that no feasible alternative locations exist, it must disclose the reasons for this conclusion, and should include the reason in the EIR.” A feasible location for the proposed project that would result in substantially reduced impacts does not exist.

The CEQA Guidelines Section 15126.6(b) requires that only locations that would avoid or substantially lessen any of the significant effects of the project need be considered for inclusion in the EIR. The Off-Site Alternative would involve the construction of the proposed project on an alternative location. The Off-Site Alternative would locate the proposed project on other lands located within the vicinity of the proposed project site. Because the project applicant does not possess a comparable property, the Off-Site Alternative has been dismissed from further consideration.

In addition, the CEQA Guidelines state that, by definition, an alternative should avoid or substantially lessen one or more of the environmental effects of the project. Alternative locations within the City would generally contain characteristics similar to the proposed project site. Development of the project on another similar site would result in an equal area being graded and, therefore, similar physical environmental impacts would occur related to land disturbance activities. In addition, the development of the same number of residential units would result in transportation, air quality, and noise impacts that would likely be very similar, or even potentially worse than the proposed project, depending on site accessibility. Furthermore, development of the same number of residential units on another similar site in the City would likely result in similar impacts associated with loss of farmland and agricultural resources. The proposed project may not be consistent with the Manteca General Plan land use designation for another site, and land use and planning impacts could potentially be greater. Similarly, an Off-Site Alternative location could currently contain housing that would need to be removed, and displacement of housing or people could occur. Accordingly, potentially greater impacts related to population and housing could occur. Therefore, development of the project at an alternative location in the City of Manteca would be expected to result in the same impacts, or worse, when compared to the proposed project. As a result, an environmentally feasible off-site location that would meet the requirements of CEQA, as well as meet the basic objectives of the project, does not exist.

Alternatives Evaluated in this EIR

The following alternatives were considered and evaluated for the proposed project:

- No Project (No Build) Alternative;
- Reduced Density Alternative; and
- Agricultural Character Alternative.

Each of the project alternatives is described in detail below, with a corresponding analysis of each alternative’s consistency with the project objectives and evaluation of impacts to the existing environment in comparison to the proposed project’s identified impacts. While an effort has been made to include quantitative data for certain analytical topics, where possible, qualitative comparisons of the various alternatives to the project are primarily provided. Such an approach to the analysis is appropriate as evidenced by CEQA Guidelines Section 15126.6(d), which states that the significant effects of the alternative shall be discussed, but in less detail than the significant effects of the project as proposed.



The analysis herein compares the impacts that would occur with the alternatives relative to the significant impacts identified for the proposed project. The EIR determined that project impacts related to substantially degrading the existing visual character or quality of public views of the site and its surroundings; the conversion of Prime Farmland, Unique Farmland, or Farmland of Statewide Importance Farmland to non-agricultural use; compliance with the policies of San Joaquin LAFCo pertaining to the conversion of agricultural land the cumulative loss of agricultural land; and conflicting or being inconsistent with CEQA Guidelines Section 15064.3, subdivision (b), during Existing Plus Project Conditions and Cumulative Plus Project Conditions, would remain significant and unavoidable, even after implementation of the feasible mitigation measures set forth in the EIR.

When comparing the potential impacts resulting from implementation of the foregoing alternatives, the following terminology is used:

- “Fewer” = Less than Proposed Project;
- “Similar” = Similar to Proposed Project; and
- “Greater” = Greater than Proposed Project.

When the term “fewer” is used, the reader should not necessarily equate this to elimination of significant impacts identified for the proposed project. For example, in many cases, an alternative would reduce the relative intensity of a significant impact identified for the proposed project, but the impact would still be expected to remain significant under the alternative, thereby requiring mitigation. In other cases, the use of the term “fewer” may mean the actual elimination of an impact identified for the proposed project altogether. Similarly, use of the term “greater” does not necessarily imply that an alternative would require additional mitigation beyond what has been required for the proposed project. To the extent possible, this analysis will distinguish between the two implications of the comparative words “fewer” and “greater”.

See Table 5-1 at the end of this chapter for a comparison of the environmental impacts resulting from the considered alternatives and the proposed project.

1. No Project (No Build) Alternative

The following section includes a description of this alternative, an evaluation of the alternative’s consistency with project objectives, and an impact comparison analysis.

Description of Alternative

CEQA requires the evaluation of the comparative impacts of the “No Project” alternative (CEQA Guidelines Section 15126.6[e]). Analysis of the no project alternative shall:

“[...] discuss [...] existing conditions [...] as well as what would be reasonably expected to occur in the foreseeable future if the project were not approved, based on current plans and consistent with available infrastructure and community services.” (*Id.*, subd. [e][2]) “If the project is other than a land use or regulatory plan, for example a development project on identifiable property, the ‘no project’ alternative is the circumstance under which the project does not proceed. Here the discussion would compare the environmental effects of the property remaining in the property’s existing state versus environmental effects that would occur if the project were approved. If disapproval of the project under consideration would result in predictable actions by others, such as the proposal of some other project, this ‘no project’ consequence should be discussed. In certain instances, the no project



alternative means ‘no build,’ wherein the existing environmental setting is maintained. However, where failure to proceed with the project would not result in preservation of existing environmental conditions, the analysis should identify the practical result of the project's non-approval and not create and analyze a set of artificial assumptions that would be required to preserve the existing physical environment.” (*Id.*, subd. [e][3][B]).

For the purposes of this analysis, the No Project (No Build) Alternative assumes the current condition of the project site would remain. Currently, the site is planted with vineyards and contains a large barn, an office structure, a tree-lined driveway, and a 20,000-square-foot (sf) residence. Because development of the site would not occur, land disturbance, and any associated physical environmental impacts related to such land disturbance, would not occur.

Consistency with Project Objectives

The No Project (No Build) Alternative would not meet any of the project objectives because the alternative would not establish a 184.7-acre community, which incorporates 152.4 acres of Low-Density Residential Land to accommodate approximately 634 single-family homes and 104 half-plex units, a 16.1-acre elementary/middle school site, and two neighborhood parks totaling 16.2 acres; design a land use plan with uses complementary to existing surrounding Low Density Residential neighborhoods and in symmetry with the larger Manteca community including approximately 634 single-family homes and 104 half-plex units; provide housing opportunities responsive to the needs of Manteca, the region and market conditions, to serve a range of family incomes and household types including approximately 634 single-family homes and 104 half-plex units; provide a pedestrian-friendly community that provides connections and access between the existing communities and Hat Ranch to the recreational areas within the public parks within the project; provide a land use plan, design standards, and guidelines consistent with Manteca General Plan goals and policies for Low Density Residential neighborhoods, incorporate market-acceptable design features, and foster an attractive, well-maintained community; establish a land use and circulation system that promotes convenient mobility, completes the extension of Pillsbury Road to Antone Raymus Parkway, and provides a setting that is safe, accessible, and convenient for all modes of travel; provide offsite improvements for Atherton Drive and Antone Raymus Parkway to complete the circulation routes as planned in the Circulation Element of the City of Manteca’s General Plan; or provide a comprehensive infrastructure system, including parks, open space, storm water quality facilities, roadways, and utilities infrastructure sized to serve the project and adjacent properties.

Impacts of Alternative

The following provides a discussion evaluating the impacts of this alternative on baseline conditions as compared to the impacts of the proposed project on baseline conditions for each impact area addressed within this EIR.

Aesthetics

The No Project (No Build) Alternative would consist of the continuation of the existing conditions of the project site. Because the No Project (No Build) Alternative would not introduce any new development on-site, the visual character of the project vicinity would not be altered. Thus, impacts related to aesthetics would be fewer under the No Project (No Build) Alternative.



Agricultural Resources

The No Project (No Build) Alternative would consist of the continuation of the existing conditions of the project site. Because the No Project (No Build) Alternative would not introduce any new development on-site, the Alternative would not convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance Farmland to non-agricultural use, or conflict with the LAFCo's policies related to such. Thus, impacts related to agricultural resources would be fewer under the No Project (No Build) Alternative.

Air Quality, Greenhouse Gas Emissions, and Energy

Because the No Project (No Build) Alternative would not involve development of the project site, the Alternative would not generate greenhouse gas (GHG) emissions, either directly or indirectly, that may have a significant impact on the environment, or conflict with any applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHG. Thus, the impacts identified for the proposed project related to air quality would not occur under the No Project (No Build) Alternative, and Mitigation Measures 4.3-7 and 4.3-8 would not be required. It should be noted that existing emissions would continue to be generated at the project site under the No Project (No Build) Alternative. However, overall impacts related to Air Quality and GHG emissions would be fewer under the No Project (No Build) Alternative.

Biological Resources

Under the No Project (No Build) Alternative, the project site, with the exception of the existing residence and the associated agricultural development, would remain generally undeveloped and would be consistent with the predominantly rural nature currently exhibited by the site, as the currently proposed project's components would not be implemented. Therefore, Mitigation Measure 4.4-1, which addresses impacts to on-site biological resources associated with the proposed project, as well as Mitigation Measure 4.4-6, which addresses impacts related to conflicts with the provisions of an adopted HCP, would not be required. Therefore, the alternative's impacts related to biological resources would be fewer as compared to the proposed project.

Cultural and Tribal Cultural Resources

Under the No Project (No Build) Alternative, the project site would remain in its current condition. Therefore, ground disturbance would not occur under the No Project (No Build) Alternative, and the Alternative would not have the potential to result in impacts to Cultural or Tribal Cultural Resources. As such, Mitigation Measures 4.5-2(a), 4.5-2(b), 4.5-3, and 4.5-4 would not be required, and the Alternative's impacts related to cultural and tribal cultural resources would be fewer as compared to the proposed project.

Geology, Soils, and Mineral Resources

Under the No Project (No Build) Alternative, the project site would remain in its current condition. Therefore, neither development of the proposed structures, nor ground disturbance, would occur under the No Project (No Build) Alternative. Mitigation Measure 4.6-1(a), 4.6-1(b), 4.6-2, and 4.6-3, which ensure preparation and compliance with a design-level geotechnical engineering report, and address potential impacts to paleontological resources, would not be required. Thus, the alternative's impacts related to geology, soils, and mineral resources would be fewer as compared to the proposed project.



Hazards and Hazardous Materials

Under the No Project (No Build) Alternative, the project site would remain in its current condition. Therefore, ground disturbance would not occur under the No Project (No Build) Alternative, and Mitigation Measures 4.7-2(a) and 4.7-2(b), which ensure the proper abandonment of the on-site wells or septic systems, would not be required. As such, the alternative's impacts related to hazards and hazardous materials would be fewer as compared to the proposed project.

Hydrology and Water Quality

Under the No Project (No Build) Alternative, the project site would remain in its current condition. Therefore, Mitigation Measures 4.8-1(a) and (b), and 4.8-3 which address potential impacts related to water quality degradation and ensure compliance with best management practices (BMPs) during project operation, would not be required. As such, the alternative's impacts related to hydrology and water quality would be fewer as compared to the proposed project.

Land Use and Planning/Population and Housing

Under the No Project (No Build) Alternative, the project site would remain generally undeveloped and would be consistent with the predominantly rural residential nature currently exhibited by the site, as the currently proposed project's components would not be implemented. Considering the existing conditions are consistent with the County's land use and zoning designation for the site, the General Plan Amendment and Rezone to accommodate the land uses planned by the proposed project would not be required. In addition, current site conditions would remain as is, and the project site would not be annexed into the City of Manteca. The City of Manteca is a "housing-rich" community, indicating more housing opportunities than jobs available. Because the No Project (No Build) Alternative would not result in the development of additional housing within the City, the Alternative would improve the jobs/housing balance as compared to project conditions. Therefore, the alternative's impacts related to land use and planning and population and housing would be fewer as compared to the proposed project.

Noise

The No Project (No Build) Alternative would consist of the continuation of the existing conditions of the project site. Because the No Project (No Build) Alternative would not introduce any new development on-site and construction would not occur, new temporary or permanent noise sources would not be generated on-site. Therefore, Mitigation Measures 4.10-1(a) and 4.10-1(b) would not be required, and the alternative's impacts related to noise would be fewer as compared to the proposed project.

Public Services, Recreation, Utilities, and Service Systems

Because the No Project (No Build) Alternative would not result in additional development on-site, an increase in demand for public services and utilities including, but not limited to, water supply and delivery; wastewater collection and treatment, solid waste disposal, law enforcement, and fire protection would not occur. Additionally, under the Alternative, the project site would not be annexed into the City of Manteca. As such, the project site would continue to be served by County providers (i.e., the San Joaquin County Sheriff's Department). Therefore, development of the No Project (No Build) Alternative would result in fewer impacts related to public services, recreation, utilities, and service systems than that of the proposed project.



Transportation

Under the No Project (No Build) Alternative, the project site would remain generally undeveloped. Therefore, Mitigation Measure 4.12-1, which addresses impacts related to vehicle miles traveled (VMT), would not be required. The Alternative would not result in the introduction of a significant number of new residences and associated improvements to the project site, which would, in turn, preclude new VMT associated with the residences. Therefore, the Alternative's impacts related to transportation would be fewer as compared to the proposed project.

2. Reduced Density Alternative

The following section includes a description of this alternative, an evaluation of the alternative's consistency with project objectives, and an impact comparison analysis.

Description of Alternative

The Reduced Density Alternative would consist of buildout of the project site with standard R-1 lots on 168.6 acres, as well as 16.2 acres of parkland. The standard R-1 lots would be built out at a maximum density of 2.1 dwelling units per acre (du/ac) for a total of 354 residential units. As such, the Reduced Density Alternative would result in the development of approximately 385 less units than the proposed project. In addition, the 16.4 acres of Public/Quasi-Public land would not be included as part of the Reduced Density Alternative. Nonetheless, the Reduced Density Alternative would still require approval of an Annexation, a General Plan Amendment, Prezone, a Tentative Map, a Development Agreement, and Design Review Guidelines, similar to the proposed project. The Reduced Density Alternative would also require on- and off-site roadway and utility improvements, similar to the improvements considered for the proposed project.

Consistency with Project Objectives

Because the Reduced Density Alternative would not include the development of approximately 738 residential units and an elementary/middle school site, the Alternative would be inconsistent with Objectives #1 #2, #3, and #5. However, the Alternative could potentially meet Objectives #4, #6, #7, and #8, albeit to a lesser extent as compared to the proposed project as the density reduction may not affect the ability for the alternative to: provide a pedestrian-friendly community that provides connections and access between the existing communities and Hat Ranch to the recreational areas within the public parks within the project; establish a land use and circulation system that promotes convenient mobility, completes the extension of Pillsbury Road to Antone Raymus Parkway, and provides a setting that is safe, accessible, and convenient for all modes of travel; provide offsite improvements for Atherton Drive and Antone Raymus Parkway to complete the circulation routes as planned in the Circulation Element of the City of Manteca's General Plan; or provide a comprehensive infrastructure system, including parks, open space, storm water quality facilities, roadways, and utilities infrastructure sized to serve the project and adjacent properties.

Impacts of Alternative

The following provides a discussion evaluating the impacts of this alternative on baseline conditions as compared to the impacts of the proposed project on baseline conditions for each impact area addressed within this EIR.



Aesthetics

Similar to the proposed project, development of the Reduced Density Alternative would convert the project site's existing agricultural uses to primarily single-family residential uses. While the Alternative would result in the development of approximately 385 less units than the proposed project, and the Public/Quasi-Public land proposed as part of the project would not be included as part of the Reduced Density Alternative, the visual character of the Alternative would remain the same as compared to the proposed project. Therefore, impacts related to aesthetics would be similar under the Reduced Density Alternative as compared to the proposed project.

Agricultural Resources

Similar to the proposed project, under the Reduced Density Alternative, the existing agricultural resources would be converted from vineyards to those of an urban setting. As such, the Reduced Density Alternative would result in the conversion of currently productive agricultural land to non-agricultural uses. Therefore, impacts related to agricultural resources under the Reduced Density Alternative would still be significant and unavoidable, and the Reduced Density Alternative would result in similar impacts as compared to the proposed project.

Air Quality, Greenhouse Gas Emissions, and Energy

The Reduced Density Alternative would decrease the total number of dwelling units constructed on the project site compared to the proposed project. Because the Reduced Density Alternative would involve fewer homes and future residents, emissions associated with vehicle trips, as well as area and energy sources, would decrease from that of the proposed project. Similar to the proposed project, construction GHG emissions under the Alternative would not exceed the South Coast Air Quality Management District's (SCAQMD) per-year screening level threshold, as construction GHG emissions would be 1,164.54 metric tons of CO₂ equivalents per year (MTCO₂e/yr).¹ However, as operational GHG emissions under the Alternative would be 3,962.81 MTCO₂e/yr, the Reduced Density Alternative would not exceed the SCAQMD per-year screening level threshold during operations, and Mitigation Measure 4.3-7 would not be required. Nonetheless, Mitigation Measure 4.3-8 would still be required to ensure that the Reduced Density Alternative would comply with the City's Climate Action Plan for GHG emissions. Factoring in the Alternative's reduced density, which would result in a reduction of air pollutants and GHG emissions generated through construction and operation of the residences, as well as from associated VMT, the Alternative's impacts related to air quality and GHGs would be fewer than the proposed project.

Biological Resources

Because the same site disturbance would occur under the Reduced Density Alternative as the proposed project, the same potential exists for effects on existing habitat, interference with native or migratory wildlife species or corridors, conflicts with policies or ordinance protecting biological resources, and conflicts with provisions of an adopted habitat conservation plan. Therefore, Mitigation Measure 4.4-1, which addresses impacts to on-site biological resources associated with the proposed project, as well as Mitigation Measure 4.4-6, which addresses impacts related to conflicts with the provisions of an adopted HCP, would still be required, and impacts related to

¹ The California Emissions Estimator Model (CalEEMod) version 2020.4.0 was used to model both air quality and GHG emissions associated with both the Reduced Density Alternative and Agricultural Character Alternative. The modeling results are included in Appendix C of this EIR.



biological resources would be similar under the Reduced Density Alternative as compared to the proposed project.

Cultural and Tribal Cultural Resources

Because the same site disturbance would occur under the Reduced Density Alternative as the proposed project, the same potential exists for changes in significance of a historical resource or unique archaeological resource, or destruction of a previously unknown cultural resource. As such, Mitigation Measures 4.5-2(a), 4.5-2(b), 4.5-3, and 4.5-4 would still be required under the Reduced Density Alternative. Therefore, impacts related to cultural resources would be similar under the Reduced Density Alternative as compared to the proposed project.

Geology, Soils, and Mineral Resources

Development of the Reduced Density Alternative would result in the same site disturbance as the proposed project, but would consist of buildout of fewer residential units. Accordingly, the same potential for on-site hazards related to geology, soils, and seismicity, such as earthquakes, soil erosion, soil stability, and expansive soil, would occur under the Reduced Density Alternative. In addition, as the Reduced Density Alternative involves buildout of the same site, the same impacts to mineral resources would occur. Furthermore, although the Reduced Density Alternative would involve fewer residential units, future residents would be exposed to the same potential geological hazards as the proposed project. Mitigation Measure 4.6-1(a), 4.6-1(b), 4.6-2, and 4.6-3, which ensure preparation and compliance with a design-level geotechnical engineering report, and address potential impacts to paleontological resources, would still be required. Therefore, the Reduced Density Alternative would result in similar impacts associated with geology, soils, and seismicity compared to the proposed project.

Hazards and Hazardous Materials

The Reduced Density Alternative would involve the same site disturbance as the proposed project. Therefore, impacts related to exposure to any existing on-site hazards or hazardous materials would be similar under the Reduced Density Alternative to the proposed project. As the Reduced Density Alternative, like the proposed project, would consist of residential uses, impacts related to the creation of hazards to the public or the environment related to the routine transport, use, or disposal of hazardous materials would be similar to that of the proposed project. Overall, the Reduced Density Alternative would result in similar impacts associated with hazards and hazardous materials as the proposed project, and Mitigation Measures 4.7-2(a) and 4.7-2(b), which ensure the proper abandonment of the on-site wells or septic systems, would still be required.

Hydrology and Water Quality

Similar to the proposed project, land disturbance would occur during construction activities associated with the Reduced Density Alternative. The Reduced Density Alternative would alter the existing drainage pattern of the site and would result in similar impacts as the proposed project related to potential water quality and erosion issues. Therefore, Mitigation Measures 4.8-1(a) and (b), and 4.8-3 which address potential impacts related to water quality degradation and ensure compliance with BMPs during project operation, would be required.

As the site is not located within a floodplain, the same impacts related to placement of structures or housing within a floodplain and associated flooding risks would occur under the Reduced



Density Alternative as the proposed project. Overall, the Reduced Density Alternative would result in similar hydrology and water quality related impacts, as compared to the proposed project.

Land Use and Planning/Population and Housing

While both the proposed project and the Reduced Density Alternative would result in the demolition of one, 20,000-sf residence, neither the proposed project nor the Reduced Density Alternative would displace a substantial amount of existing housing or people, and both would create housing on the site. In addition, similar to the proposed project, the Reduced Density Alternative would still require approval of an Annexation, a General Plan Amendment, Prezone, a Tentative Map, a Development Agreement, and Design Review Guidelines. Therefore, under the Reduced Density Alternative, the impacts related to land use and planning would be similar as compared to that of the proposed project.

Noise

Development of the Reduced Density Alternative would include the development of fewer dwelling units, as well as the exclusion of 16.4 acres of Public/Quasi-Public land. A decrease in the total number of dwelling units could also decrease the amount of construction time, thereby resulting in fewer construction-related noise and vibration impacts. However, Mitigation Measures 4.10-1(a) and 4.10-1(b) would still be required. However, because the Reduced Density Alternative would generate fewer future residents and would not include the school use on-site, the noise associated with project-generated vehicle trips and school noise would be reduced to less than that of the proposed project. Therefore, the Reduced Density Alternative would result in fewer noise-related impacts than that of the proposed project.

Public Services, Recreation, Utilities, and Service Systems

Because the Reduced Density Alternative would consist of fewer residential units and associated population, as well as the exclusion of 16.4 acres of Public/Quasi-Public land intended for the development of a school, a decrease in demand for public services and utilities including, but not limited to, water supply and delivery; wastewater collection and treatment, solid waste disposal, law enforcement, and fire protection would result under the Reduced Density Alternative. Therefore, development of the Reduced Density Alternative would result in fewer impacts related to public services and utilities than that of the proposed project.

Transportation

The Reduced Density Alternative would consist of fewer residential units and associated population, as well as the exclusion of 16.4 acres of Public/Quasi-Public land. Because the Reduced Density Alternative would result in the development of 354 residential units, the Alternative would generate approximately, 3,342 daily trips.² According to the Transportation Analysis prepared for the proposed project by Fehr & Peers, the average trip length per single-family household would be 12.1 miles. However, because the Reduced Density Alternative would not include the development of a school on-site, the internal trip reduction for school-related trips that would occur under the proposed project would not occur under the Alternative, and the actual average trip length under the Alternative may be longer than 12.1 miles. Nonetheless, the estimated total daily VMT for the Reduced Density Alternative would be approximately 40,438,

² Trip generation for the Reduced Density Alternative were calculated using the daily trip generation rate of 9.44 for single-family detached land uses, consistent with the Transportation Analysis prepared by Fehr & Peers for the proposed project.



which would be lower than the proposed project's total daily VMT of 84,689. However, the per capita VMT under the Alternative would be similar to, or greater than, the proposed project's per capita VMT of 114.6. As such, Mitigation Measure 4.12-1 would still be required as the Alternative would still result in vehicle travel exceeding 15 percent below the City's established baseline, and the Alternative may exceed the City's VMT threshold.

Nonetheless, because the Alternative would reduce total project-generated VMT, the Alternative's impacts related to transportation would be fewer as compared to the proposed project. However, while impacts related to transportation would be fewer, the Reduced Density Alternative would not eliminate the significant and unavoidable impact related to the City's VMT threshold.

3. Agricultural Character Alternative

The following section includes a description of this alternative, an evaluation of the alternative's consistency with project objectives, and an impact comparison analysis.

Description of Alternative

The Agricultural Character Alternative would consist of buildout of the western half of the project site as proposed under project conditions, while the eastern half of the site, which includes the existing vineyards, large barn, office structure, tree-lined driveway, and 20,000-sf residence, would remain as is. The Agricultural Character Alternative would develop 281 single-family detached units, as well as 48 half-plex units for a total of 329 residential units. In addition, a total of 6.9 acres of parkland would be developed under the Alternative. As such, the Agricultural Character Alternative would result in the development of approximately 410 less residential units, and approximately 9.3 acres of parkland less than the proposed project. In addition, the 16.4 acres of Public/Quasi-Public land proposed under project conditions would not be included as part of the Alternative.

The Agricultural Character Alternative would still require approval of an Annexation, a General Plan Amendment, Prezone, a Tentative Map, a Development Agreement, and Design Review Guidelines, similar to the proposed project. On- and off-site roadway and utility improvements would still be required under the Agricultural Character Alternative, similar to the improvements considered for the proposed project.

Consistency with Project Objectives

Because the Agricultural Character Alternative would only include development of the western parcel of the project site, and would not include the development of 738 residential units, an elementary/middle school site, and two neighborhood parks, the Alternative would be inconsistent with Objectives #1, #2, #3, and #5. However, the Alternative could potentially meet Objectives #4, #6, #7, and #8, albeit to a lesser extent as compared to the proposed project, as the reduction in the overall disturbance area of the project site may not affect the ability for the Alternative to provide a pedestrian-friendly community that provides connections and access between the existing communities and Hat Ranch to the recreational areas within the public parks within the project; establish a land use and circulation system that promotes convenient mobility, completes the extension of Pillsbury Road to Antone Raymus Parkway, and provides a setting that is safe, accessible, and convenient for all modes of travel; provide offsite improvements for Atherton Drive and Antone Raymus Parkway to complete the circulation routes as planned in the Circulation Element of the City of Manteca's General Plan; or provide a comprehensive infrastructure system,



including parks, open space, storm water quality facilities, roadways, and utilities infrastructure sized to serve the project and adjacent properties.

Impacts of Alternative

The following provides a discussion evaluating the impacts of this alternative on baseline conditions as compared to the impacts of the proposed project on baseline conditions for each impact area addressed within this EIR.

Aesthetics

Similar to the proposed project, development of the Agricultural Character Alternative would convert the project site's existing agricultural uses to primarily single-family residential uses. However, the Alternative would result in the development of approximately 410 less residential units and approximately 9.3 acres of parkland less than the proposed project. In addition, the Public/Quasi-Public land proposed as part of the project would not be included as part of the Agricultural Character Alternative. Furthermore, because the Alternative would only develop the western half of the project site, the existing character of the Agricultural Character Alternative would be reduced as compared to the proposed project. Therefore, impacts related to aesthetics would be fewer under the Agricultural Character Alternative as compared to the proposed project.

Agricultural Resources

Similar to the proposed project, under the Agricultural Character Alternative, the existing agricultural resources would be converted from vineyards to those of an urban setting. As such, the Agricultural Character Alternative would result in the conversion of currently productive agricultural land to non-agricultural uses. Therefore, impacts related to agricultural resources under the Agricultural Character Alternative would still be significant and unavoidable. However, because the Alternative would only develop the western half of the project site, the total acreage of agricultural land that would be converted to non-agricultural uses would be reduced as compared to the proposed project. Therefore, impacts related to agricultural uses would be fewer under the Agricultural Character Alternative as compared to the proposed project.

Air Quality, Greenhouse Gas Emissions, and Energy

The Agricultural Character Alternative would decrease the total number of dwelling units constructed on the project site compared to the proposed project., as well as the overall disturbance area of the project site. Because the Agricultural Character Alternative would involve the development of fewer homes and future residents, emissions associated with construction, as well as vehicle trips and area and energy sources during operations, would decrease from that of the proposed project. Similar to the proposed project, construction GHG emissions under the Alternative would not exceed the SCAQMD per-year screening level threshold, as construction GHG emissions would be 802.95 MTCO₂e/yr.³ However, as operational GHG emissions under the Alternative would be 3,872.61 MTCO₂e/yr, the Agricultural Character Alternative would not exceed the SCAQMD per-year screening level threshold during operations, and Mitigation Measure 4.3-7 would not be required. Mitigation Measure 4.3-8 would still be required to ensure that the Agricultural Character Alternative would comply with the City's Climate Action Plan for GHG emissions. Factoring in the Alternative's reduced footprint and number of lots, which would

³ CalEEMod version 2020.4.0 was used to model both air quality and GHG emissions associated with both the Reduced Density Alternative and Agricultural Character Alternative. The modeling results are included in Appendix C of this EIR.



result in a reduction of air pollutants and GHG emissions generated through construction and operation of the residences, as well as from associated VMT, the Alternative's impacts related to air quality and GHGs would be fewer than the proposed project.

Biological Resources

While the disturbance area of the Agricultural Character Alternative would be reduced as compared to the proposed project, the Agricultural Character Alternative would involve similar construction activities as the proposed project. Therefore, if grubbing, grading, or construction were to take place during the nesting season, generally between February 1 and September 1, nesting passerine birds could be impacted by the Agricultural Character Alternative. Therefore, the potential exists under the Agricultural Character Alternative for effects on existing habitat, interference with native or migratory wildlife species or corridors, conflicts with policies or ordinance protecting biological resources, and conflicts with the provisions of an adopted habitat conservation plan. Mitigation Measures 4.4-1 and 4.4-6 would still be required. Nonetheless, factoring in the Alternative's reduced footprint, which would result in a reduction of areas which would be disturbed during project construction, the Alternative's impacts related to biological resources would be fewer than the proposed project.

Cultural and Tribal Cultural Resources

While the disturbance area of the Agricultural Character Alternative would be reduced as compared to the proposed project, the Agricultural Character Alternative would involve similar construction activities as the proposed project. Therefore, the potential would still exist for changes in the significance of a historical resource or unique archaeological resource, or destruction of a previously unknown cultural resource, and Mitigation Measures 4.5-2(a), 4.5-2(b), 4.5-3, and 4.5-4 would still be required under the Agricultural Character Alternative. However, due to the Alternative's smaller area of disturbance, the Alternative's impacts to cultural and tribal cultural resources would be fewer as compared to the proposed project.

Geology, Soils, and Mineral Resources

While the disturbance area of the Agricultural Character Alternative would be reduced as compared to the proposed project, the Agricultural Character Alternative would involve similar construction activities as the proposed project. Accordingly, the potential for on-site hazards related to geology, soils, and seismicity, such as earthquakes, soil erosion, soil stability, and expansive soil, would occur under the Agricultural Character Alternative. Therefore, Mitigation Measure 4.6-1(a), 4.6-1(b), 4.6-2, and 4.6-3, which ensure preparation and compliance with a design-level geotechnical engineering report, and address potential impacts to paleontological resources, would still be required. However, considering the Alternative's smaller footprint, the Alternative's impacts to geology and soils and mineral resources would be fewer as compared to the proposed project.

Hazards and Hazardous Materials

Because the Agricultural Character Alternative would only develop the western half of the project site, the disturbance area of the Alternative would be reduced as compared to the proposed project. In addition, Mitigation Measures 4.7-2(a) and 4.7-2(b), which ensure the proper abandonment of the on-site wells or septic systems located within areas of the eastern parcel, would not be required under the Agricultural Character Alternative, because the eastern parcel would remain as is. Furthermore, as the Agricultural Character Alternative, like the proposed project, would consist of residential uses, impacts related to the creation of hazards to the public



or the environment related to the routine transport, use, or disposal of hazardous materials would be similar to that of the proposed project. Therefore, the Agricultural Character Alternative would result in fewer impacts associated with hazards and hazardous materials as the proposed project.

Hydrology and Water Quality

While the area of disturbance to implement the alternative would be smaller in comparison to the proposed project, the alternative would still include the development of impervious surfaces on site. As such, similar to the proposed project, land disturbance would occur during construction activities associated with the Agricultural Character Alternative, and the Agricultural Character Alternative would alter the existing drainage pattern of the site. Therefore, the Alternative would have the potential to result in impacts related to water quality and erosion, and Mitigation Measures 4.8-1(a) and (b), and 4.8-3 would be required. As the site is not located within a floodplain, the same impacts related to placement of structures or housing within a floodplain and associated flooding risks would occur under the Agricultural Character Alternative as the proposed project. However, considering the Alternative's smaller footprint, the Agricultural Character Alternative's impacts to hydrology and water quality would be fewer as compared to the proposed project.

Land Use and Planning/Population and Housing

The Agricultural Character Alternative would require similar approvals to the proposed project, such as Annexation, a General Plan Amendment, Prezone, Tentative Map, a Development Agreement, and Design Review Guidelines. However, the Agricultural Character Alternative would not result in the demolition of the 20,000-sf residence on-site. While development of the Alternative would occur near existing agricultural uses, such uses would be sufficiently separated by the new and existing roadways. Moreover, the City's Right-to-Farm Ordinance requires clear disclosure and notification of such agricultural uses prior to the issuance of any building permit. As such, compliance with the Right-to-Farm ordinance would ensure that the existing agricultural uses on the eastern half of the project site do not result in conflicts with the residential uses on the western half of the project site that would be developed under the Alternative. Therefore, under the Agricultural Character Alternative, the impacts related to land use and planning would be fewer as compared to that of the proposed project.

Noise

Development of the Agricultural Character Alternative would include the development of approximately 410 less residential units and approximately 9.3 acres of parkland less than the proposed project, as well as the exclusion of 16.4 acres of Public/Quasi-Public land. A decrease in the total number of dwelling units could also decrease the amount of construction time, thereby resulting in fewer construction-related noise and vibration impacts. However, Mitigation Measures 4.10-1(a) and 4.10-1(b) would still be required. However, because the Agricultural Character Alternative would involve a fewer amount of future residents, and school uses would not occur on-site, noise levels associated with a decrease in project-generated vehicle trips could be fewer than that of the proposed project. Therefore, the Agricultural Character Alternative would result in fewer noise-related impacts than that of the proposed project.

Public Services, Recreation, Utilities, and Service Systems

Because the Agricultural Character Alternative would consist of fewer residential units and associated population, as well as the exclusion of 16.4 acres of Public/Quasi-Public land intended for the development of school uses, a decrease in demand for public services and utilities



including, but not limited to, water supply and delivery; wastewater collection and treatment, solid waste disposal, law enforcement, and fire protection would result under the Agricultural Character Alternative. Therefore, development of the Agricultural Character Alternative would result in fewer impacts related to public services and utilities than that of the proposed project.

Transportation

The Agricultural Character Alternative would consist of fewer residential units and associated population, as well as the exclusion of 16.4 acres of Public/Quasi-Public land. Because the Agricultural Character Alternative would result in the development of 329 residential units, the Alternative would generate approximately, 3,106 daily trips.⁴ According to the Transportation Analysis prepared for the proposed project by Fehr & Peers, the average trip length per single-family household would be 12.1 miles. However, because the Agricultural Character Alternative would not include the development of a school on-site, the internal trip reduction for school-related trips that would occur under the proposed project would not occur under the Alternative, and the actual average trip length under the Alternative may be longer than 12.1 miles. Nonetheless, the estimated total daily VMT for the Agricultural Character Alternative would be approximately 37,580, which would be lower than the proposed project's total daily VMT of 84,689. However, the per capita VMT under the Alternative would be similar to, or greater than, the proposed project's per capita VMT of 114.6. As such, Mitigation Measure 4.12-1 would still be required as the Alternative would still result in vehicle travel exceeding 15 percent below the City's established baseline, and the Alternative may exceed the City's VMT threshold.

Nonetheless, because the Alternative would reduce total project-generated VMT, the Alternative's impacts related to transportation would be fewer as compared to the proposed project. However, while impacts related to transportation would be fewer, the Reduced Density Alternative would not eliminate the significant and unavoidable impact related to the City's VMT threshold.

5.4 ENVIRONMENTALLY SUPERIOR ALTERNATIVE

An EIR is required to identify the environmentally superior alternative from among the range of reasonable alternatives that are evaluated. Section 15126(e)(2) of the CEQA Guidelines requires that an environmentally superior alternative be designated and states, "If the environmentally superior alternative is the 'no project' alternative, the EIR shall also identify an environmentally superior alternative among the other alternatives."

Designating a superior alternative depends in large part on what environmental effects one considers most important. This Draft EIR does not presume to make this determination; rather, the determinations of which impacts are more important are left to the reader and the decision makers. Generally, the environmentally superior alternative is the one that would result in the fewest environmental impacts as a result of project implementation. However, it should be noted that the environmental considerations are one portion of the factors that must be considered by the public and the decisionmakers in deliberations on the proposed project and the alternatives. Other factors of importance include urban design, economics, social factors, and fiscal considerations. In addition, the superior alternative would, ideally, still provide opportunities to achieve most of the stated project objectives.

⁴ Trip generation for the Agricultural Character Alternative were calculated using the daily trip generation rate of 9.44 for single-family detached land uses, consistent with the Transportation Analysis prepared by Fehr & Peers for the proposed project.



A comparison of the proposed project to the three alternatives discussed in detail above is illustrated in Table 5-2, below. Aside from the No Project (No Build) Alternative, the development alternatives could potentially meet some of the proposed project's objectives, albeit to a lesser extent as compared to the proposed project. As shown in the table, the Reduced Density Alternative would result in fewer impacts than the proposed project in four resource areas, and equal impacts in eight resource areas. The Agricultural Character Alternative would result in fewer impacts than the proposed project in all resource areas. Therefore, the Agricultural Character Alternative would be considered the Environmentally Superior Alternative. However, the same significant and unavoidable impacts that would occur with the proposed project would still occur under the Agricultural Character Alternative. As such, the number of significant and unavoidable impacts overall would be similar under the Agricultural Character Alternative and the proposed project.



**Table 5-1
Comparison of Environmental Impacts for Project Alternatives**

Resource Area	Proposed Project level of significance after mitigation	1. No Project (No Build) Alternative	2. Reduced Density Alternative	3. Agricultural Character Alternative
Aesthetics	Less than Significant	<	=	<
Agricultural Resources	Significant and Unavoidable	<	=*	<*
Air Quality, Greenhouse Gas Emissions, And Energy	Significant and Unavoidable	<	<	<
Biological Resources	Less than Significant	<	=	<
Cultural and Tribal Resources	Less than Significant	<	=	<
Geology, Soils, and Mineral Resources	Less than Significant	<	=	<
Hazards and Hazardous Materials	Less than Significant	<	=	<
Hydrology and Water Quality	Less than Significant	<	=	<
Land Use and Planning/Population and Housing	Less than Significant	<	=	<
Noise	Less than Significant	<	<	<
Public Services, Recreation, Utilities, and Service Systems	Less than Significant	<	<	<
Transportation	Significant and Unavoidable	<	<*	<*

Note: Less than Proposed Project = "<"; Similar to Proposed Project = "="; Greater than Proposed Project = ">".

* Significant and Unavoidable impact(s) determined for the proposed project would still be expected to occur under the Alternative.



6. STATUTORILY REQUIRED SECTIONS

6. STATUTORILY REQUIRED SECTIONS

6.1 INTRODUCTION

The Statutorily Required Sections chapter of the EIR includes discussions regarding those topics that are required to be included in an EIR, pursuant to CEQA Guidelines Section 15126.2. The chapter includes a discussion of the proposed project's potential to result in growth-inducing impacts; the cumulative setting analyzed in this EIR; significant irreversible environmental changes; and significant and unavoidable impacts caused by the proposed project.

6.2 GROWTH-INDUCING IMPACTS

State CEQA Guidelines Section 15126.2(d) requires an EIR to evaluate the potential growth-inducing impacts of a proposed project. Specifically, an EIR must discuss the ways in which a proposed project could foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment. Growth can be induced in a number of ways, including the elimination of obstacles to growth, or by encouraging and/or facilitating other activities that could induce growth. Examples of projects likely to have growth-inducing impacts include extensions or expansions of infrastructure systems beyond what is needed to serve project-specific demand, and development of new residential subdivisions or office complexes in areas that are currently only sparsely developed or are undeveloped.

The CEQA Guidelines are clear that while an analysis of growth-inducing effects is required, it should not be assumed that induced growth is necessarily significant or adverse. This analysis examines the following potential growth-inducing impacts related to implementation of the proposed project and assesses whether these effects are significant and adverse (see CEQA Guidelines Section 15126.2[d]):

1. Foster population and economic growth and construction of housing;
2. Eliminate obstacles to population growth;
3. Affect service levels, facility capacity, or infrastructure demand; and
4. Encourage or facilitate other activities that could significantly affect the environment.

Foster Population and Economic Growth and Construction of Housing

As discussed in Chapter 4.9, Land Use and Planning/Population and Housing, of this EIR, development of the site with 634 single-family detached residential units and 104 half-plex residential units would increase the available housing within the Manteca area, which would be expected to increase population in the area. Based on socioeconomic characteristics of developments in the immediate vicinity of the project site, the proposed project is projected to result in a potential population increase of 2,214 residents. The City of Manteca's CMU designation provides for a potential housing density of 15.1 to 25 du/ac, while the LDR designation proposed for the project provides for 2.1 to 8.0 du/ac. Approximately 7.6 acres of the project site are currently designated as CMU, which could potentially result in a total potential development of up to 1,417 residential units, and 4,251 new residents. In comparison, the proposed project's density would result in a significantly smaller influx of residents than the density allowed by the current land use designation; 738 units developed on the site would result in a housing density of



4.9 du/ac and an influx of 2,214 residents. Therefore, the proposed project would not induce population growth that is more substantial than what has previously been anticipated for the project site by the City. Because buildout of the City, including the proposed project, has been anticipated in regional development forecasts, implementation of the proposed project would not result in unplanned population growth within the project area. Furthermore, the infrastructure included in the proposed project would be sized to accommodate buildout of the proposed project.

While construction of the proposed project would result in increased construction employment opportunities, which could potentially result in increased permanent population and demand for housing in the vicinity of the project site, employment patterns of construction workers is such that construction workers would not likely, to any significant degree, relocate their households as a result of the construction-related employment opportunities associated with the proposed project.

Although the proposed project would provide short-term employment opportunities, which would likely be filled from the local employee base, with the possible exception of a few household and landscape maintenance jobs, permanent jobs would not be created by the proposed project. In addition, because the proposed project would redesignate 7.6 acres of the site from CMU to LDR, new commercial or office jobs would not be created at the project site. Therefore, the proposed project would not result in long-term employment growth in the area.

Appendix G of CEQA Guidelines has been recently amended to clarify that unplanned population growth would be considered a potentially significant impact. However, growth that is planned, and the environmental effects of which have been analyzed in connection with a land use plan or a regional plan, should not by itself be considered an impact. Although the project requires annexation into the City of Manteca, the parcel is within the City's Sphere of Influence and has been assigned land use and zoning designations, and is, therefore, anticipated for growth within the City's General Plan. Consequently, the proposed project would result in population growth within the City, but such growth would be within the buildout projections for the City of Manteca. Thus, while the project would foster population and economic growth, such growth would be similar to what has been previously anticipated for the project region, and a less-than-significant impact related to population and economic growth would occur.

Eliminate Obstacles to Population Growth

The elimination of either physical or regulatory obstacles to growth is considered to be a growth-inducing effect. A physical obstacle to growth typically involves the lack of public service infrastructure. The extension of public service infrastructure, including roadways, water mains, and sewer lines, into areas that are not currently provided with these services, would be expected to support new development. Similarly, the elimination or change to a regulatory obstacle, including existing growth and development policies, could result in new growth.

As discussed in Chapter 4.11, Public Services, Recreation, Utilities, and Service Systems, of this EIR, the proposed project would be provided connections to existing water lines, which are currently stubbed in the neighborhood roadways in the Pillsbury Estates and Woodward Park developments to the north and Evans Estates to the west. As part of the proposed project, the existing stub streets of Polk Street, Buena Vista Drive, Inyo Avenue, and Jigsaw Avenue would be extended into the project site. New water pipes would similarly be extended from the existing stubbed water pipes, which would ensure adequate flow to all portions of the project for both domestic use and fire protection. As such, new regional infrastructure would not be required. Water conveyance systems needed for the proposed project would be constructed on-site, and



would be financed by the project applicant. Consequently, the construction of on-site water infrastructure would not be anticipated to result in elimination of obstacles to population growth.

As also discussed in Chapter 4.11 of this EIR, wastewater from the proposed project would be conveyed through new sanitary sewer pipes located within the site's proposed interior roadways. Similar to the project's water lines, sewer conveyance would be provided to the project site by way of new connections to the existing sewer infrastructure adjacent to the project site. The proposed project would connect to existing sewer lines, which are currently stubbed in the neighborhood roadways of the surrounding single-family residential communities. With the extension of existing stub streets Polk Street, Buena Vista Drive, Inyo Avenue, and Jigsaw Avenue into the project site, new sewer lines would similarly be extended through the project site. The project's on-site wastewater infrastructure would connect to a new sewer main that would be located within the right-of-way (ROW) of Antone Raymus Parkway. The new sewer main would be extended westward to the Manteca Road/Antone Raymus Parkway intersection, at which point the sewer main would connect to a new off-site sewer lift station and existing sanitary sewer lines within Manteca Road, where wastewater would flow north, eventually connecting to the existing wastewater main along Woodward Avenue. The existing sewer lines convey wastewater to an influent pump station located at the Manteca-Lathrop Water Quality Control Facility (WQCF). The wastewater treatment projections used in the General Plan were determined based on population growth estimates, and land use designations were not considered. As such, even though the proposed project includes a change in land use designation, the project would be included as part of the City's planned regional growth estimated. Because City wastewater conveyance facilities currently exist in the project area and would not require the construction of new or expanded infrastructure due to development of the proposed project, the proposed project would not eliminate obstacles to growth that were not previously anticipated for the area.

In regard to roadway improvements, the proposed project would feature entrances from Pillsbury Road, the future Antone Raymus Parkway, and the Atherton Drive extension. Internal street connections would be provided to the adjacent Pillsbury Estates and Woodward Park developments to the north and Evans Estates to the west by extending the existing stub streets of Polk Street, Buena Vista Drive, Inyo Avenue, and Jigsaw Avenue into the project site. In addition, the proposed project would require off-site circulation improvements, including the development of Antone Raymus Parkway, which would feature an east-to-west layout from Manteca Road to the Atherton Drive extension and would be constructed over two phases, as well as improvements to East Atherton Drive from Antone Raymus Parkway to the end of the existing street improvement north of the project site. As such, the roadway improvements associated with the proposed project would only serve to connect the project site to the existing developments in the project vicinity. In addition, the improvements would allow for greater emergency access to the project site and the surroundings. Therefore, the roadway improvements associated with the proposed project would not connect to undeveloped areas, and would not be considered the elimination of an obstacle to population growth.

Based on the above, the roadway and utility improvements included as part of the proposed project have been generally anticipated by the City. In addition, all infrastructure improvements planned for the project were sized to be sufficient to handle to the proposed project's demands only. All such improvements were reviewed by the City of Manteca Public Works Department and would be financed by the project applicant. Thus, the proposed project would result in a less-than-significant impact in regard to eliminating obstacles to population growth.



Affect Service Levels, Facility Capacity, or Infrastructure Demand

Increases in population that would occur as a result of a proposed project may tax existing community service facilities, requiring construction of new facilities that could cause significant environmental impacts. As discussed in Chapter 4.11, Public Services, Recreation, Utilities, and Service Systems, of this EIR, increased demands for fire and police protection services attributable to the proposed project would necessitate the need for additional resources for the Manteca Fire District and the Manteca Police Department. However, the project applicant would be subject to payment of development fees and contribution to tax revenue funds, including the City's Fire Facilities Fee and Water Facilities Development Fee. As such, impacts to fire and law enforcement services would be considered fully mitigated with payment of such fees. In addition, wastewater generated by the proposed project could be accommodated by existing wastewater treatment facilities and infrastructure, and existing water supply infrastructure exists to accommodate the domestic and fire flow demands associated with the proposed project.

The landfill that would serve the proposed project has adequate capacity to manage the solid waste generated as a result of the project. Furthermore, mitigation measures set forth in Chapter 4.8, Hydrology and Water Quality, of this EIR would ensure that the proposed project would not create or contribute runoff water that would exceed the capacity of the City's stormwater drainage systems. Therefore, the proposed project would not increase population such that service levels, facility capacity, or infrastructure demand would require construction of new facilities that could cause significant environmental impacts.

Encourage or Facilitate other Activities That Could Significantly Affect the Environment

This EIR provides a comprehensive assessment of the potential for environmental impacts associated with implementation of the proposed project. Please refer to Chapters 4.1 through 4.12, of this EIR, which evaluate the potential for impacts from urban development on the project site.

6.3 CUMULATIVE IMPACTS

CEQA Guidelines Section 15130 requires that an EIR discuss the cumulative and long-term effects of the proposed project that adversely affect the environment. "Cumulative impacts" are defined as "two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts" (CEQA Guidelines Section 15355). "[I]ndividual effects may be changes resulting from a single project or a number of separate projects" (CEQA Guidelines Section 15355, subd. [a]). "The cumulative impact from several projects is the change in the environment which results from the incremental impact of the project when added to other closely related past, present, and reasonably foreseeable probable future projects. Cumulative impacts can result from individually minor but collectively significant projects taking place over a period of time" (CEQA Guidelines Section 15355, subd. [b]).

The need for cumulative impact assessment reflects the fact that, although a project may cause an "individually limited" or "individually minor" incremental impact that, by itself, is not significant, the increment may be "cumulatively considerable," and, thus, significant, when viewed together with environmental changes anticipated from past, present, and probable future projects (CEQA Guideline Section 15064, subd. [h(1)], Section 15065, subd. [c], and Section 15355, subd. [b]). Accordingly, particular impacts may be less than significant on a project-specific basis but significant on a cumulative basis if their small incremental contribution, viewed against the larger backdrop, is cumulatively considerable. However, it should be noted that CEQA Guidelines



Section 15064, Subdivision (h)(5) states, “[...]the mere existence of significant cumulative impacts caused by other projects alone shall not constitute substantial evidence that the proposed project’s incremental effects are cumulatively considerable.” Therefore, even where cumulative impacts are significant, any level of incremental contribution is not necessarily deemed cumulatively considerable.

Section 15130(b) of CEQA Guidelines indicates that the level of detail of the cumulative analysis need not be as great as for the project impact analyses, but that analysis should reflect the severity of the impacts and their likelihood of occurrence, and that the analysis should be focused, practical, and reasonable. To be adequate, a discussion of cumulative effects must include the following elements:

- (1) Either (a) a list of past, present and probable future projects, including, if necessary, those outside the agency’s control, or (b) a summary of projections contained in an adopted general plan or related planning document, or in a prior certified EIR, which described or evaluated regional or area-wide conditions contributing to the cumulative impact, provide that such documents are reference and made available for public inspection at a specified location;
- (2) A summary of the individual projects’ environmental effects, with specific reference to additional information and stating where such information is available; and
- (3) A reasonable analysis of all of the relevant projects’ cumulative impacts, with an examination of reasonable, feasible options for mitigating or avoiding the project’s contribution to such effects (Section 15130[b]).

For some projects, the only feasible mitigation measures will involve the adoption of ordinances or regulations, rather than the imposition of conditions on a project-by-project basis (Section 15130[c]). Section 15130(a)(3) states that an EIR may determine that a project’s contribution to a significant cumulative impact will be rendered less than cumulatively considerable, and thus not significant, if a project is required to implement or fund the project’s fair share of a mitigation measure or measures designed to alleviate the cumulative impact. A discussion of cumulative impacts is provided within in each of the technical chapters of this EIR pursuant to CEQA Guidelines Section 15130.

Cumulative Setting

The lead agency should define the relevant geographic area of inquiry for each impact category (id., Section 15130, subd. [b][3]), and should then identify the universe of “past, present, and probable future projects producing related or cumulative impacts” relevant to the various categories, either through the preparation of a “list” of such projects or through the use of “a summary of projections contained in an adopted general plan or related planning document, or in a prior environmental document which has been adopted or certified, which described or evaluated regional or area wide conditions contributing to the cumulative impact” (id., subd. [b][1]).

As discussed above, two approaches to identifying cumulative projects and their associated impacts can be used. The “list” approach identifies individual projects known to be occurring or proposed in the surrounding area in order to identify potential cumulative impacts. The “projection” approach uses a summary of projections in adopted General Plans or related planning documents to identify potential cumulative impacts. This EIR uses the projection approach for the cumulative analysis and considers the development anticipated to occur upon buildout of the City of Manteca General Plan.



Limited situations exist where the geographic setting differs for the analysis of various resource areas. For example, the cumulative geographic setting for the air quality analysis is the San Joaquin Valley Air Basin, which is the air basin that the proposed project is located within. Global climate change is, by nature, a cumulative impact. Emissions of greenhouse gases (GHGs) contribute, on a cumulative basis, to the significant adverse environmental impacts of global climate change (e.g., sea level rise, impacts to water supply and water quality, public health impacts, impacts to ecosystems, impacts to agriculture, and other environmental impacts). A single project could not generate enough GHG emissions to contribute noticeably to a change in the global average temperature. However, the combination of GHG emissions from a project in combination with other past, present, and future projects could contribute substantially to the world-wide phenomenon of global climate change and the associated environmental impacts. Although the geographical context for global climate change is the Earth, for analysis purposes under CEQA, and due to the regulatory context pertaining to GHG emissions and global climate change applicable to the proposed project, the geographical context for global climate change in this EIR is limited to the State of California.

In addition, as discussed in Chapter 4.12, Transportation, of this EIR, the cumulative traffic analysis relied on the Transportation Analysis prepared for the proposed project by Fehr & Peers (see Appendix K), as well as the City of Manteca General Plan and the City of Manteca General Plan EIR. Based on the City's requirements, the growth assumptions used in the traffic analysis include cumulative buildout of land uses identified in the City of Manteca General Plan, with and without the proposed project. The cumulative setting for the transportation and circulation analysis also includes the anticipated roadway geometry and traffic control anticipated to be present in 2035.

Cumulative impacts are analyzed in each of the technical chapters of this EIR (Chapters 4.1 through 4.12). For those environmental resource areas that have a different cumulative setting from the general cumulative setting described above, the specific cumulative setting for that resource area is presented along with the cumulative impact discussion in the relevant resource area chapter of the EIR.

6.4 SIGNIFICANT IRREVERSIBLE ENVIRONMENTAL CHANGES

Per CEQA Guidelines Section 15126.2(c), this EIR is required to include consideration of significant irreversible environmental changes that would be caused by the proposed project, should the project be implemented. An impact would be determined to be a significant and irreversible change in the environment if:

- Buildout of the project area could involve a large commitment of nonrenewable resources;
- The primary and secondary impacts of development could generally commit future generations to similar uses (e.g., a highway provides access to a previously remote area);
- Development of the proposed project could involve uses in which irreversible damage could result from any potential environmental accidents associated with the project; or
- The phasing and eventual development of the project could result in an unjustified consumption of resources (e.g., the wasteful use of energy).

The proposed project would likely result in, or contribute to, the following significant irreversible environmental changes:



- Conversion of vacant land to a fully built-out residential community, thus precluding alternative land uses in the future; and
- Irreversible consumption of goods and services, such as fire, police, and school services, associated with the future population; and
- Irreversible consumption of energy and natural resources, such as water, electricity, and natural gas, associated with the future residents.

Therefore, the proposed project would likely result in significant irreversible environmental changes, as noted above.

6.5 SIGNIFICANT AND UNAVOIDABLE IMPACTS

According to CEQA Guidelines, an EIR must include a description of those impacts identified as significant and unavoidable should the proposed action be implemented (CEQA Guidelines Section 15126.2[b]). Such impacts would be considered unavoidable when the determination is made that either mitigation is not feasible or only partial mitigation is feasible such that the impact is not reduced to a level that is less-than-significant.

Based on the analysis provided in Chapters 4.1 through 4.12 of this EIR, the below listed impacts were determined to be significant and unavoidable. All other impacts identified in this EIR could be eliminated or reduced to a less-than-significant level by mitigations imposed by the City. The final determination of the significance of impacts and the feasibility of mitigation measures would be made by the City as part of the City's certification action.

4.2-1 Impacts related to the conversion of Prime Farmland, Unique Farmland, or Farmland of Statewide Importance Farmland to non-agricultural use.

As noted on page 4.2-18 of Chapter 4.2, Agricultural Resources, of this EIR, implementation of Mitigation Measure 4.2-1 would ensure that the proposed project complies with all applicable provisions set forth by the San Joaquin County Multi-Species Habitat Conservation and Open Space Plan (SJMSCP), including those regarding the conversion of agricultural land to urban uses. However, while payment of fees to the SJMSCP would preserve and/or create habitat in preserves that would be managed in perpetuity, the impact would not be reduced to a less-than significant level due to the fact that active agricultural land would still be permanently converted to urban uses. Other feasible mitigation does not exist to reduce the above impact to a less-than-significant level. Therefore, the impact would remain *significant and unavoidable*.

4.2-3 Impacts related to compliance with the policies of San Joaquin LAFCo pertaining to the conversion of agricultural land.

As noted on page 4.2-14 of Chapter 4.2, Agricultural Resources, of this EIR, the proposed project site meets multiple criteria to qualify as San Joaquin Local Agency Formation Commission (LAFCo) Prime Agricultural Land. Therefore, the proposed project site is defined as prime agricultural farmland under Section 56064 of the Cortese-Knox-Hertzberg Act. Therefore, the project would result in a



significant and unavoidable impact with regards to compliance with LAFCo's policies related to the conversion of agricultural land to urban uses.

4.3-7 Generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment.

As noted on page 4.3-58 of Chapter 4.3, Air Quality, Greenhouse Gas Emissions, and Energy, of this EIR, the proposed project would be required to demonstrate compliance with applicable measures included in the City's Climate Action Plan, to the satisfaction of the City of Manteca Development Services Department, including exceeding current Title 24 Energy Efficiency Standards by 10 percent and implementing a recycling or waste diversion program sufficient to exceed the State recycling and diversion targets by at least 10 percent. However, incorporation of such measures would not guarantee that maximum annual GHG emissions generated during project operation would be reduced such that emissions would be below South Coast Air Quality Management District's per-year screening level threshold of 10,000 metric tons of CO₂ equivalents. Therefore, even with incorporation of the following mitigation measure, the project's contribution would remain *cumulatively considerable* and *significant and unavoidable*.

4.12-2 Conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b), during Existing Plus Project Conditions.

As noted on page 4.12-24 of Chapter 4.12, Transportation and Circulation, of this EIR, the proposed project would generate an estimated average of 114.6 VMT per single family household, which represents an approximately 10 percent increase from the Existing Conditions vehicle miles traveled (VMT). As such, the proposed project would generate vehicle travel exceeding 15 percent below the established baseline. Given the suburban land use context of the City, the effectiveness of Transportation Demand Management measures cannot be guaranteed to reduce the project VMT or total VMT impacts to a less-than-significant level. Implementation of Mitigation Measure 4.12-2 would reduce the impact, but not to a less-than-significant level. Therefore, the impact would remain *significant and unavoidable*.

4.12-4 Conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b), during Cumulative Plus Project Conditions.

As noted on page 4.12-26 of Chapter 4.12, Transportation and Circulation, of this EIR, the proposed project would generate an estimated average of 83.0 VMT per single family household under Cumulative Plus Project Conditions, which represents an approximately 6.8 percent increase from Cumulative VMT conditions. As such, the proposed project would generate vehicle travel exceeding 15 percent below the established baseline. Implementation of Mitigation Measure



4.12-2 would reduce the impact, but not to a less-than-significant level. Therefore, the impact would remain *significant and unavoidable*.



7. REFERENCES

7. REFERENCES

1. Acacia Consultants and Engineers. *Geotechnical Feasibility Study Prepared for Richland Developers*. November 26, 2012.
2. Assembly Committee on Local Government. *Guide to the Cortese-Knox-Hertzberg Local Government Reorganization Act of 2000* [pg. 11]. November 2020.
3. Cal-Adapt. *Local Climate Change Snapshot for Manteca, California*. Available at: <https://cal-adapt.org/tools/local-climate-change-snapshot>. Accessed March 2022.
4. California Air Pollution Control Officers Association. *California Emissions Estimator Model User's Guide Version 2020.4.0*. May 2021.
5. California Air Resources Board. *Airborne Toxic Control Measure to Limit Diesel-Fueled Commercial Motor Vehicle Idling*. Available at: <https://ww2.arb.ca.gov/our-work/programs/atcm-to-limit-vehicle-idling/about>. Accessed March 2022.
6. California Air Resources Board. *Air Quality and Land Use Handbook: A Community Health Perspective*. April 2005.
7. California Air Resources Board. *In-Use Off-Road Diesel Vehicle Regulation*. Available at: <https://ww2.arb.ca.gov/our-work/programs/use-road-diesel-fueled-fleets-regulation>. Accessed March 2022.
8. California Air Resources Board. *Reducing Toxic Air Pollutants in California's Communities*. February 6, 2002.
9. California Air Resources Board. *The 2017 Climate Change Scoping Plan Update*. January 20, 2017.
10. California Code of Regulations, Title 13, Article 4.8, Chapter 9, Section 2449.
11. California Department of Conservation. *Important Farmland Categories*. Available at: <https://www.conservation.ca.gov/dlrp/fmmp/Pages/Important-Farmland-Categories.aspx>. Accessed April 2022.
12. California Department of Conservation, California Geological Survey. *Earthquake Zones of Required Investigation*. Available at: <https://maps.conservation.ca.gov/cgs/EQZApp/app/>. Accessed April 2022.
13. California Department of Education. *Enrollment by School*. Available at: <https://www.cde.ca.gov/ds/sd/sd/filesenr.asp>. Accessed April 2021.
14. California Department of Resources Recycling and Recovery. *SWIS Facility/Site Activity Details: Forward Landfill, Inc. (39-AA-0015)*. Available at: <https://www2.calrecycle.ca.gov/SolidWaste/SiteActivity/Details/1434?siteID=3106>. Accessed March 2021.
15. California Department of Transportation. *Scenic Highways*. Available at: <https://dot.ca.gov/programs/design/lap-landscape-architecture-and-community-livability/lap-liv-i-scenic-highways>. Accessed December 2020.



16. California Energy Commission. *About the California Energy Commission*. Available at: <http://www.energy.ca.gov/commission/index.html>. Accessed March 2022.
17. California Energy Commission. *Electricity Consumption by County*. Available at: <http://ecdms.energy.ca.gov/elecbycounty.aspx>. Accessed February 2022.
18. California Legislative Information. *Cortese-Knox-Hertzberg Local Government Reorganization Act of 2000 [56000-57550]*. Available at: leginfo.ca.gov/faces/codes_displaySection.xhtml?lawCode=GOV§ionNumber=56064. Accessed January 2021.
19. California Public Utilities Commission. *About the California Public Utilities Commission (CPUC)*. Available at: <https://www.cpuc.ca.gov/about-cpuc/cpuc-overview/about-us>. Accessed March 2022.
20. Cities of Lathrop, Lodi, Manteca, Patterson, and Tracy, San Joaquin County. *Multi-Agency Post-Construction Stormwater Standards Manual*. June 2015.
21. City of Manteca. *2012 Wastewater Collection System Master Plan Update*. Adopted 2013.
22. City of Manteca. *Active Transportation Plan*. August 2020.
23. City of Manteca. *City of Manteca 2013 Public Facilities Implementation Plan Update*. Available at: <https://www.ci.manteca.ca.us/Engineering/Pages/PFIP.aspx#:~:text=The%20Public%20Facilities%20Implement%20Plan,City's%20General%20Plan%20Policy%20Document.&text=The%20program%20and%20fees%20for,until%20updated%20in%20the%20future>. Accessed January 2021.
24. City of Manteca. *City of Manteca 2015-2023 Housing Element*. Adopted January 19, 2016.
25. City of Manteca. *City of Manteca General Plan 2023 Environmental Impact Report*. Certified October 6, 2003.
26. City of Manteca. *Climate Action Plan*. October 15, 2013.
27. City of Manteca. *Manteca General Plan 2023 Policy Document*. October 6, 2003.
28. City of Manteca. *Storm Drain Master Plan*. Available at: <https://www.ci.manteca.ca.us/Engineering/Pages/default.aspx>. Accessed January 2021.
29. City of Manteca. *Storm Water Management Program*. Available at: <https://www.ci.manteca.ca.us/Engineering/Pages/default.aspx>. Accessed January 2021.
30. Department of Conservation. *CGS Information Warehouse: Landslides*. Available at: <http://maps.conservation.ca.gov/cgs/informationwarehouse/>. Accessed January 2021.
31. Eastern San Joaquin Groundwater Authority. *Eastern San Joaquin Groundwater Subbasin Groundwater Sustainability Plan*. November 2019.
32. ENGEO, Inc. *Geotechnical Exploration: Hat Ranch Property, Manteca, California*. January 18, 2019.
33. ENGEO, Inc. *Phase I Environmental Site Assessment, Hat Ranch Property, Manteca, California*. December 2, 2020.
34. Fehr and Peers. *Hat Ranch Project – Transportation Analysis*. July 19, 2022.



35. Intergovernmental Panel on Climate Change. *Climate Change 2021: The Physical Science Basis Summary for Policymakers*. Available at: <https://www.ipcc.ch/report/sixth-assessment-report-working-group-i/>. Accessed March 2022.
36. j.c. brennan & associates, Inc. *Hat Ranch Environmental Noise Assessment*. February 18, 2021.
37. Monk & Associates, Inc. *Biological Resource Analysis, Hat Ranch Property, City of Manteca, California*. December 1, 2020.
38. National Center for Biotechnology Information, U.S. National Library of Medicine, National Institutes of Health. *Organochlorine pesticides, their toxic effects on living organisms and their fate in the environment*. Available at: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5464684/>. Accessed June 2022.
39. National Highway Traffic Safety Administration. *In Removing Major Roadblock to State Action on Emissions Standards, U.S. Department of Transportation Advances Biden-Harris Administration's Climate and Jobs Goals*. Available at: <https://www.nhtsa.gov/press-releases/cafe-preemption-final-rule>. Accessed March 2022.
40. Natural Resources Conservation Service. *Soil Survey for San Joaquin County (Soil Map)*. November 14, 2013.
41. Office of Environmental Health Hazard Assessment. *Air Toxics Hot Spots Program Risk Assessment Guidelines, Guidance Manual for Preparation of Health Risk Assessments*. February 2015.
42. Placer County Air Pollution Control District. *2017 CEQA Handbook: Chapter 4, Analyzing Operations Criteria Pollutant Emissions*. 2017.
43. Ripon Unified School District. *Facilities Assessment and Implementation Plan*. Available at: <https://www.riponusd.net/ripon-usd-facilities-master-plan>. Accessed June 2021.
44. San Joaquin Council of Governments. *2014-2023 Regional Housing Needs Plan*. Adopted August 28, 2014.
45. San Joaquin Council of Governments. *2018 Regional Transportation Plan Sustainable Communities Strategy*. Adopted June 2018.
46. San Joaquin Council of Governments, California. *Measure K*. Available at: <https://www.sjcog.org/300/Measure-K>. Accessed May 2022.
47. San Joaquin County. *San Joaquin County 2025 General Plan Environmental Impact Report*. October 2014.
48. San Joaquin County Local Agency Formation Commission. *Change of Organization Policies and Procedures*. Available at: <https://www.sjgov.org/commission/lafco/policies>. Accessed December 2020.
49. San Joaquin County Local Agency Formation Commission. *Policies and Procedures*.
50. San Joaquin Valley Air Pollution Control District. *District Policy Addressing GHG Emission Impacts for Stationary Source Projects Under CEQA When Serving as the Lead Agency*. December 17, 2009.
51. San Joaquin Valley Air Pollution Control District. *Environmental Review Guidelines Procedures for Implementing the California Environmental Quality Act*. August 2000.



52. San Joaquin Valley Air Pollution Control District. *Frequently Asked Questions*. Available at: <https://ww2.valleyair.org/about/frequently-asked-questions/>. Accessed April 2022.
53. San Joaquin Valley Air Pollution Control District. *Guidance for Assessing and Mitigating Air Quality Impacts* [pg. 90]. February 19, 2015.
54. San Joaquin Valley Air Pollution Control District. *Guidance for Assessing and Mitigating Air Quality Impacts* [pg 109]. March 19, 2015.
55. San Joaquin Valley Air Pollution Control District. *Guidance for Valley Land-use Agencies in Addressing GHG Emission Impacts for New Projects under CEQA*. December 17, 2009.
56. San Joaquin Valley Air Pollution Control District. *Guide for Assessing and Mitigating Air Quality Impacts*. Revised January 10, 2002.
57. Saxelby Acoustics LLC. *Hat Ranch Traffic Noise Review*. October 20, 2021.
58. South Coast Air Quality Management District. *Attachment E: Draft Guidance Document – Interim CEQA Greenhouse Gas (GHG) Significance Threshold*. [pg. 3-18]. October 2008.
59. South Coast Air Quality Management District. *Board Letter – Interim CEQA GHG Significance Threshold for Stationary Sources, Rules and Plans*. December 5, 2008.
60. State of California Department of Finance. *E-5 Population and Housing Estimates for Cities, Counties, and the State, 2011-2020, with 2010 Census Benchmark*. May 2020.
61. State of California, Governor's Office of Planning and Research. *CEQA and Archaeological Resources*. April 1994.
62. State of the Cities Data Systems. *Building Permits Database*. Available at: <https://socds.huduser.gov/permits/>. Accessed January 2021.
63. Tom Origer & Associates, Inc. *A Cultural Resources Survey for South of Woodward Avenue South – Hat Ranch, Manteca, San Joaquin County, California*. October 14, 2013.
64. U.S. Environmental Protection Agency. *Final Rule to Revise Existing National GHG Emissions Standards for Passenger Cars and Light Trucks Through Model Year 2026*. Available at: <https://www.epa.gov/regulations-emissions-vehicles-and-engines/final-rule-revise-existing-national-ghg-emissions>. Accessed March 2022.
65. U.S. Environmental Protection Agency. *Potential Well Water Contaminants and Their Impacts*. Available at: <https://www.epa.gov/privatewells/potential-well-water-contaminants-and-their-impacts#:~:text=Heavy%20metals%20can%20contaminate%20private,water%20seepage%20and%20run%20off.&text=Radionuclides%20can%20contaminate%20private%20wells,increase%20the%20risk%20of%20cancer>. Accessed February 2021.
66. U.S. Environmental Protection Agency. *Sources of Greenhouse Gas Emissions*. Available at: <https://www.epa.gov/ghgemissions/sources-greenhouse-gas-emissions>. Accessed March 2022.
67. U.S. Environmental Protection Agency. *User's Guide for the AMS/EPA Regulatory Model (AERMOD)*. December 2016.



68. U.S. Environmental Protection Agency. *What is EPA's Action Level for Radon and What Does it Mean?* Available at: <https://www.epa.gov/radon/what-epas-action-level-radon-and-what-does-it-mean>. Accessed February 2021.
69. United States Department of Agriculture, National Resources Conservation Service. *Web Soil Survey*. Accessed November 30, 2020.
70. United States Department of Agriculture, Soil Conservation Service. *Soil Survey of San Joaquin County, California*. October 1992.
71. Weather Spark. *Average Weather in Manteca, California, United States*. Available at: <https://weatherspark.com/y/1086/Average-Weather-in-Manteca-California-United-States-Year-Round>. Accessed December 2020.
72. West Yost. *Hat Ranch Water Supply Assessment*. November 2021.



8. EIR AUTHORS AND PERSONS CONSULTED

8. EIR AUTHORS AND PERSONS CONSULTED

Raney Planning & Management, Inc.

C. Timothy Raney, AICP	President
Cindy Gnos, AICP	Senior Vice President
Nick Pappani	Vice President
Rod Stinson	Vice President
Angela DaRosa	Division Manager/Air Quality Specialist
Brie Shea	Senior Associate/Air Quality Technician
Joe Baucum	Associate
Jesse Fahrney	Associate

City of Manteca

Jeffrey Hightower	Deputy Director - Planning
Lea Simvoulakis	Planning Manager
John Anderson	Contract Planner
Mark Niskanen	Contract Planner

Acacia Consultants and Engineers, Inc.

William M. Kenney	Principal Engineer
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ENGEO Incorporated

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Jason Sedore	Staff Geologist
Shawn Munger	Principal Geologist
Steve Harris	Registered Professional Engineer
Zac Crawford	Certified Engineering Geologist

J.C. Brennan & Associates

Jim Brennan	President
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Monk & Associates, Inc.

Zachery Stratton	Staff Biologist
------------------	-----------------

Musco Lighting

Hunter Sabers	Project Engineer
---------------	------------------

Saxelby Acoustics

Luke Saxelby	Principal Consultant
--------------	----------------------



San Joaquin County Local Agency

Jim Glaser

Executive Director

Tom Origer & Associates

Eileen Barrow

Senior Associate

West Yost

Elizabeth T. Drayer
Jim Connell

Engineering Manager
Principal Engineer



APPENDIX A



CITY OF MANTECA

COMMUNITY DEVELOPMENT DEPARTMENT

DATE: January 22, 2021

TO: Interested Parties

SUBJECT: **Notice of Preparation of an Environmental Impact Report (EIR) for the Proposed Hat Ranch Project**

**LEAD AGENCY
CONTACT:**

John B. Anderson, Contract Planner
Community Development Department
City of Manteca
1001 West Center Street
Manteca, CA 95337
(209) 456-8505
john@jbandersonplanning.com

REVIEW PERIOD: **January 22, 2021 – February 23, 2021**

Notice is hereby given that the City of Manteca is the lead agency for the preparation of a project-level Environmental Impact Report (EIR) for the proposed Hat Ranch Project (proposed project), in accordance with the California Environmental Quality Act (CEQA), Section 15050. The purpose of this Notice of Preparation (NOP) is to provide responsible agencies and interested persons with sufficient information in order to provide meaningful input on the scope and content of the EIR. Your timely comments will ensure an appropriate level of environmental review for the project.

Scoping Meeting: The Lead Agency will hold a public scoping meeting to receive verbal comments on the scope of the EIR on February 10, 2021 at 7:00 PM.

Pursuant to Governor Newsom's Executive Order N-29-20, the meeting will be held via video- and teleconference. Members of the public are invited to participate via Zoom, which will be used to share information during the meeting. Prior to attendance, the City is requesting that you RSVP to John B. Anderson, Contract Planner, john@jbandersonplanning.com. Use the link below to join the Zoom meeting via computer, tablet, or smart phone. Those without a computer, tablet, or smart phone, may also join via telephone.

Meeting Information:

To join the meeting from your computer, tablet or smartphone.

Topic: Hat Ranch Annexation CEQA Scoping Meeting
Time: Feb 10, 2021 07:00 PM Pacific Time (US and Canada)

Join Zoom Meeting

<https://us02web.zoom.us/j/81589510777?pwd=V0pNNzkrbFg4YVlIVkZhS2RjblozZz09>

Meeting ID: 815 8951 0777

Passcode: 653550

One tap mobile

+16699006833,,81589510777#,,, *653550# US (San Jose)

+13462487799,,81589510777#,,,,*653550# US (Houston)

Dial by your location

+1 669 900 6833 US (San Jose)

+1 346 248 7799 US (Houston)

+1 253 215 8782 US (Tacoma)

+1 929 205 6099 US (New York)

+1 301 715 8592 US (Washington D.C)

+1 312 626 6799 US (Chicago)

Meeting ID: 815 8951 0777

Passcode: 653550

Find your local number: <https://us02web.zoom.us/j/81589510777>

A copy of this NOP is available for review at the City of Manteca Community Development Department and on the City of Manteca website:

<https://www.ci.manteca.ca.us/CommunityDevelopment/Planning%20Division/Pages/default.aspx>

PROJECT DESCRIPTION:

Project Location and Setting

The proposed project site is comprised of three parcels totaling approximately 184.4 acres located southeast of the City of Manteca City limits in an unincorporated area of San Joaquin County (see Figure 1). The project site is identified by Assessor's Parcels Numbers (APNs) 226-120-100, 226-120-110 (the "Western Parcels", and 226-140-04 (the "Eastern Parcels").

Existing Land Uses

The proposed project site is currently designated as Urban Reserve-Low Density Residential (UR-LDR), Park (P), and Commercial Mixed Use (CMU) by the City of Manteca 2023 General Plan and as Agricultural-Urban Reserve (A/UR) by the San Joaquin County General Plan. The Western Parcels are planted with vineyards. The Eastern Parcel is planted with vineyards and contains a large barn, an office structure, a tree-lined driveway, and a 20,000-square foot (sf) residence in the middle of the proposed project (see Figure 2). The City limits currently make up the project's western, northern, and eastern boundaries, while unincorporated agricultural land borders the project site to the south. State Route (SR) 99 is located approximately 1.5 miles northeast of the project site. Upon buildout of the proposed project, the proposed site would be bordered by the future Antone Raymus Expressway to the south and the future Atherton Drive to the east.

Surrounding Land Uses

Land surrounding the project site to the north, west and east is currently designated on the Manteca 2023 General Plan as Low Density Residential (LDR), and Urban Reserve-Low Density Residential (UR-LDR) to the south. Orchards are located to the east and ; however, the City of Manteca General Plan designates these lands as LDR and UR-LDR respectively.

Project Components

The proposed project would include a master planned residential community of up to 739 dwelling units, two neighborhood parks, and a 16.4 acre elementary/middle school located on a project site of approximately 184-acres. The proposed project would include the development of 627 traditional single-family detached homes and a unique district of 112 "half-plex" units. The existing 20,000-sf residence would either be retained or demolished; if demolished, the residence would be replaced with single-family lots consistent with the proposed development. Both of these conditions for the existing residence referenced above will be analyzed in this EIR. The proposed project would require detachment from the Fire Districts

of Lathrop-Manteca and Ripon as well as detachment from the San Joaquin County Resource Conservation District, annexation to the City of Manteca, Prezoning, and a General Plan Map Amendment (GPA). The proposed project would also include approval of two (2) Tentative Maps, a Development Agreement, and Design Review for the proposed half-plex units.

Annexation and Prezoning

The proposed project is currently located within the unincorporated area of San Joaquin County and has a San Joaquin County General Plan land use designation of A/UR and zoning of AG-40. The proposed project would require the annexation of the project site into the City of Manteca and prezone with City zoning from AG-40 to Planned Development Low Density Residential (PD-R1), Public/Quasi-Public (PQP), and Planned Development Park (PD-P) (see Figure 3). The annexation of the 184.4-acre site to the City of Manteca would require San Joaquin County Local Agency Formation Commission (LAFCO) approval. In addition, as the proposed project would be served by the Manteca Fire Department upon formal annexation, detachment from both the Lathrop-Manteca Fire District (for the Western Parcels) and the Ripon Fire District (for the Eastern Parcel) would require approval by San Joaquin County LAFCO.

General Plan Map Amendment

The City of Manteca General Plan designates the project site as UR-LDR, P, and CMU. Therefore, an amendment to the General Plan Land Use Map would be required to eliminate the Commercial Mixed Use (approximately 7.6 acres) and Urban Reserve designations and redesignate the site with approximately 152.2-acres of LDR, 16.4-acres of PQP land uses for an elementary/middle school, and 16.2-acres of Park (P) (see Figure 4). The parkland within the project site would be divided into two park areas located on both the Eastern and Western Parcels, referred to as East Neighborhood Park and West Neighborhood Park, respectively. Therefore, the GPA would also include the on-site re-location of the Park designations. The proposed General Plan designations will be consistent with the preferred land use map identified in the City of Manteca General Plan Update.

Tentative Subdivision Maps (East and West)

The proposed project includes 739 single-family lots; including 627 single-family detached homes and a unique district of 112 “half-plex” units, two public parks, and an elementary/middle school. The Eastern Parcel Tentative Map (TM) includes approximately 410 single-family residential lots over approximately 104.1-acres of land, resulting in a density of 3.9 dwelling units per acre (du/ac). Of the 410 dwelling units, approximately 346 would be constructed as single-family residential, while 64 units would be constructed as half-plex units. In addition, the Eastern Parcel TM allocates approximately 9.3-acres to parkland located directly adjacent to a proposed elementary/middle school consisting of 16.4-acres (see Figure 5). The Western Parcels TM includes approximately 329 single-family residential lots over approximately 80.3-acres of land, resulting in a density of 3.9 du/ac. Of the 329 dwelling units, 281 would be constructed as single-family residential units, while 48 of the dwelling units would be half-plex units. The Western Parcels would also contain 6.9-acres of parkland and upland play area along the northern boundary of the project site (see Figure 6).

Proposed Roadways and Infrastructure

The proposed project infrastructure includes roadways, pedestrian and bicycle facilities, and wastewater, water, and storm drain systems. Streets and infrastructural improvements would constitute a total of 11.5 acres within the project site.

The main entrances into the Hat Ranch site would be at Pillsbury Road. Pillsbury Road would serve to divide the project into a Western Parcel and an Eastern Parcel. Street connections would be provided to the adjacent Pillsbury Estates and Woodward Park developments to the north and Evans Estates to the west by extending the existing stub streets of Polk Street, Buena Vista Drive, Inyo Avenue, Jigsaw Avenue, and Veramonte Avenue into the project site. In addition, the future Antone Raymus Expressway is proposed

along the southern boundary of the project site, and the future Atherton Drive is proposed along the eastern boundary of the project site. Pillsbury Road would be extended through the project site from the north to connect to the future Antone Raymus Expressway. Off-site circulation improvements would include the construction of frontage surface improvements from the intersection of Antone Raymus/Manteca Road heading east toward Pillsbury Road, and extending to Atherton Drive. Off-site circulation improvements to Antone Raymus Expressway would include 26 feet of roadway, seven feet of a 14-foot wide median, and 20 feet of sidewalk and landscaped area (a half section). The offsite circulation improvements to Atherton Drive would include 27 feet of roadway, seven feet of the 14-foot median, and 22 feet of sidewalk and landscaped areas (a half section). The proposed right-of-way (ROW) areas for pedestrians and vehicular travel would vary between 50 and 112 feet to allow for on-street parking; meandering, five-foot sidewalks; and landscaping and utility improvements.

Proposed Public Utilities

Water would be provided to the project site through new connections to the existing water infrastructure surrounding the project site. Specifically, water pipes would run beneath the streets to ensure adequate flow to all portions of the project for both domestic use and fire protection. The proposed water system would connect to existing City water lines within the Manteca Road/Antone Raymus intersection. In addition, the proposed project would allocate space for a future 125-foot by 150-foot City-operated water well within the East Neighborhood Park to accommodate new development within the City of Manteca.

Wastewater from the proposed project would be conveyed through a system of pipelines to the City's Wastewater Quality Control Facility (WQCF). New sanitary sewer pipes located within the proposed roadways would flow westward through pipes along the future Antone Raymus Expressway, connecting to a new off-site sewer lift station and existing sanitary sewer lines in Manteca Road where wastewater would flow north, eventually connecting to the existing wastewater main along Woodward Avenue.

Stormwater from both the Eastern Parcel and the Western Parcels would first be treated in each area's respective stormwater bioretention basin. The bioretention basins would be located within the dedicated parkland areas on the eastern and western sides of Pillsbury Road prior to discharge from an associated pump station. In addition, two flood control detention basins would be located adjacent to the bioretention basins to provide surface storage to detain stormwater during major storm events. The detention basins would be designed to temporarily store stormwater runoff to reduce the peak rate of runoff to the storm drainage system during rain or flood events. Treated stormwater from both parcels would flow through a pump station and connect to a main located in Pillsbury Road extending to SSJID Lateral X. From SSJID Lateral X, treated stormwater from both parcels would flow to the French Camp Outlet Canal, which drains to the French Camp Slough and eventually the San Joaquin River. Treated stormwater from the Western Parcel would also flow through a secondary pump station to a water quality detention basin located adjacent to the bioretention basin within the West Neighborhood Park. In addition, a 5.3-acre flood control detention basin would be located adjacent to the bioretention basin located within the eastern parkland area adjacent to the elementary/middle school and would be designed to temporarily store stormwater runoff during major rain or flood events.

Planned Development/Development Agreement

The applicant has requested a Planned Development, which suggests superior design elements to those of the City's existing standards and addresses the inclusion of alternative streetscape features and design elements. As noted above, allowed uses within a Planned Development Zoning District are those listed uses in the adopted Planned Development document, subject to City Council approval. Where a Planned Development does not provide a listing of allowed uses, the regulations of the Base Zoning District, R-1, shall prevail. The proposed Planned Development standards for the proposed project build upon the City of Manteca's Standards for R-1 Standard and Small Lot Single Family Development, as defined in Section 17.26.040 of the Municipal Code. However, certain deviations from the base zoning district have been proposed; for example, setbacks for the proposed half-plex units would be reduced to suggest that front setbacks would be a minimum of 15 feet, side setbacks would range between zero feet and five feet, and rear setbacks would range between five feet and 10 feet.

The project also includes a Development Agreement between the applicant and the City to confirm certain development rights.

Design Guidelines

As part of the Planned Development, the proposed project would require approval of Design Guidelines, which would provide the framework for future development within the project site. The Design Guidelines would address the proposed inclusion of alternative streetscape features and development design elements as compared to existing City standards related to parks, landscaping, and architecture.

Project Phasing

The proposed project would be constructed in multiple phases over the course of several years. Infrastructure and amenities would be constructed commensurate with each phase of development dependent on the service demands of each phase and as required by the City of Manteca.

Project Entitlements

The City of Manteca is the CEQA lead agency for the proposed project. The proposed project requires the approval of the following discretionary actions/entitlements by the City of Manteca:

- Authorization to file an Annexation application to San Joaquin LAFCO to annex the subject property into the City of Manteca City Limits; and,
- General Plan Land Use Map Amendments from UR-LDR and CMU to LDR, PQP, and an on-site relocation of and an increase in the P designation; and,
- Prezone of the 184.4-acre site to Planned Development (PD-R-1, PD-Park), and Public Quasi Public (PQP); and,
- Approval of two (2) Tentative Subdivision Maps (Eastern and Western Parcels); and,
- Approval of a Development Agreement; and,
- Approval of Design Review Guidelines.

Implementation of the proposed project would also require the following City of Manteca approvals:

- Approval of Final Maps; and,
- Approval of Subdivision Improvement Agreement; and,
- Grading Permits; and,
- Approval of Building Permits; and
- Approval of Occupancy Permits

2.0 PROBABLE ENVIRONMENTAL EFFECTS AND SCOPE OF THE EIR

The City has reviewed the proposed project application and has determined that an EIR should be prepared for the proposed project because it may have a significant effect on the environment. The City has concluded that the EIR should address potential project-related impacts pertaining to the following resource areas:

Aesthetics
Agricultural Resources
Air Quality
Biological Resources
Cultural/Tribal Resources
Geology, Soils, and Seismicity
Greenhouse Gas (GHG) Emissions and Energy

Hazards and Hazardous Materials (including Wildfire)
Hydrology and Water Quality
Land Use and Planning
Noise
Population and Housing
Public Services and Utilities
Recreation
Transportation and Circulation

Each chapter of this EIR will include a discussion of the existing setting, thresholds of significance, evaluation of potential impacts, and if necessary, feasible mitigation measures to reduce or eliminate potentially significant impacts to the applicable resource.

Additionally, the EIR will include cumulative impacts analyses, as well as analyses of alternatives to the proposed project.

SUBMITTING COMMENTS

To ensure that all significant issues related to the proposed project are identified and addressed, written comments are invited from all interested parties. **To be considered, all comments must be in writing and clearly legible.** Written comments concerning the proposed CEQA analysis for the Hat Ranch project should be directed to the name and address below:

John B. Anderson, Contract Planner
Community Development Department
City of Manteca
1001 West Center Street
Manteca, CA 95337
Office: (209) 456-8505
john@jbandersonplanning.com

Written comments are due to the City of Manteca at the location addressed above by 5:00 p.m. on February 23, 2021.

Figure 1
Regional Location

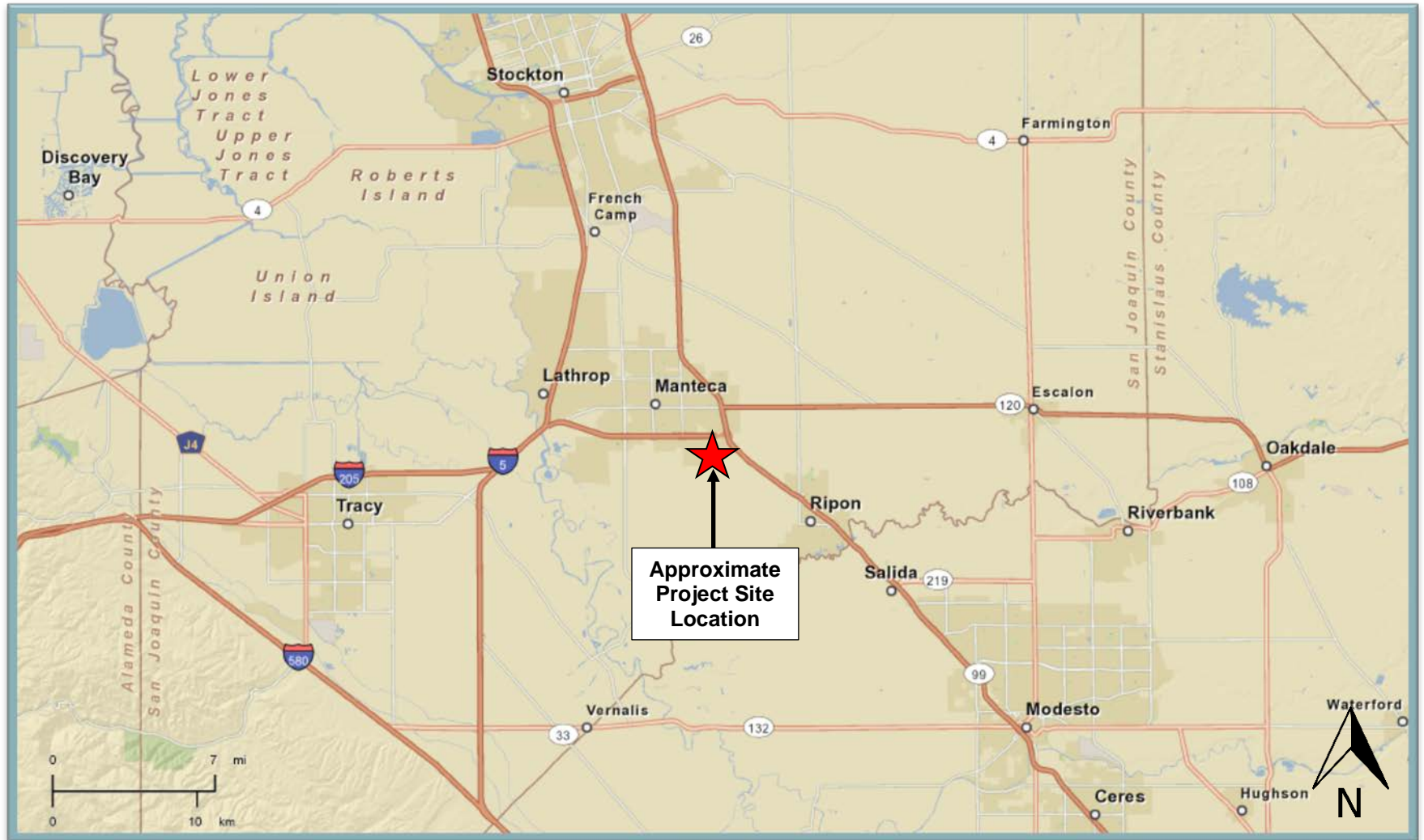


Figure 2
Project Location

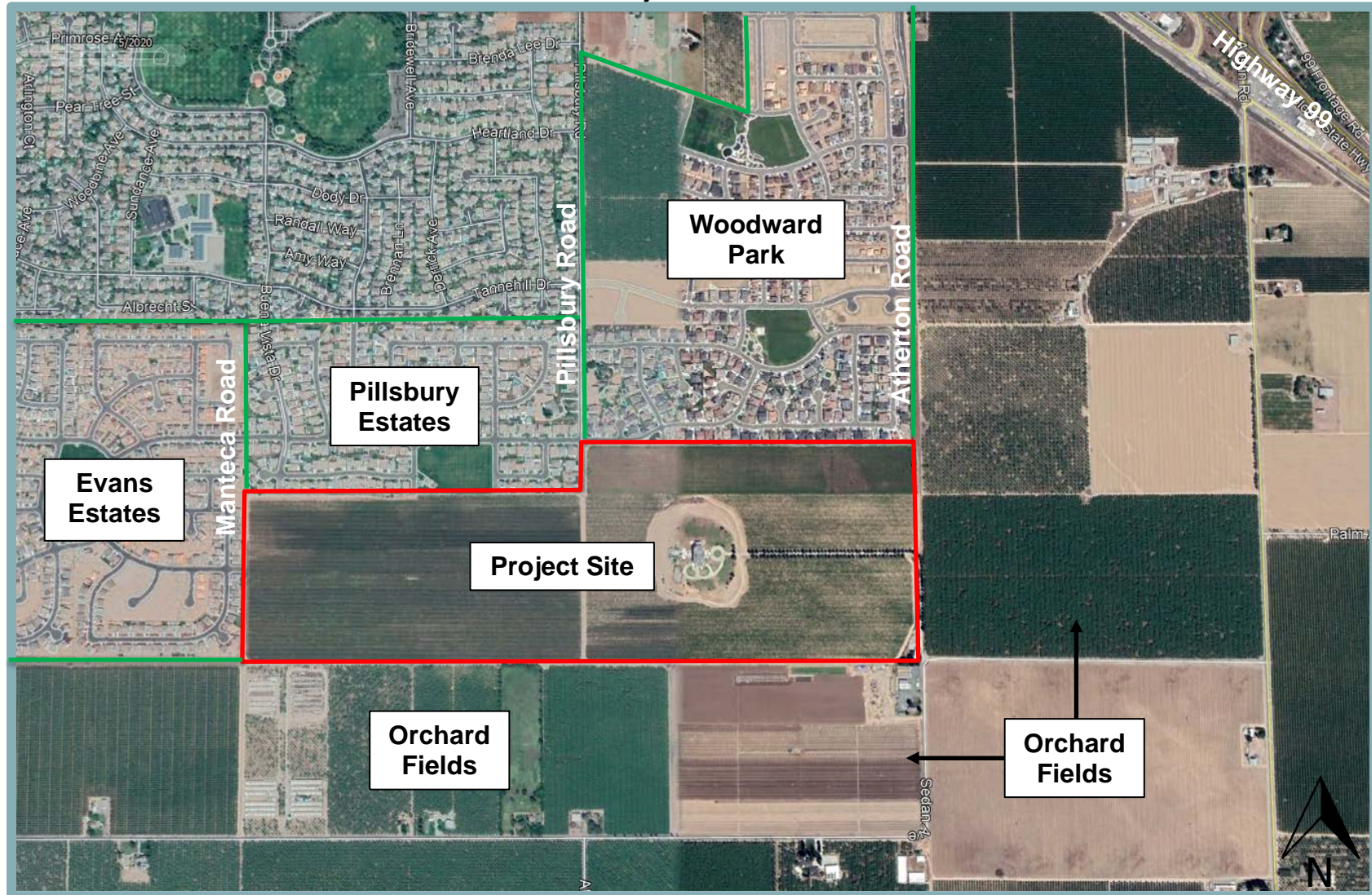


Figure 3
Pre-Zone Site Map



Figure 4
General Plan Amendment

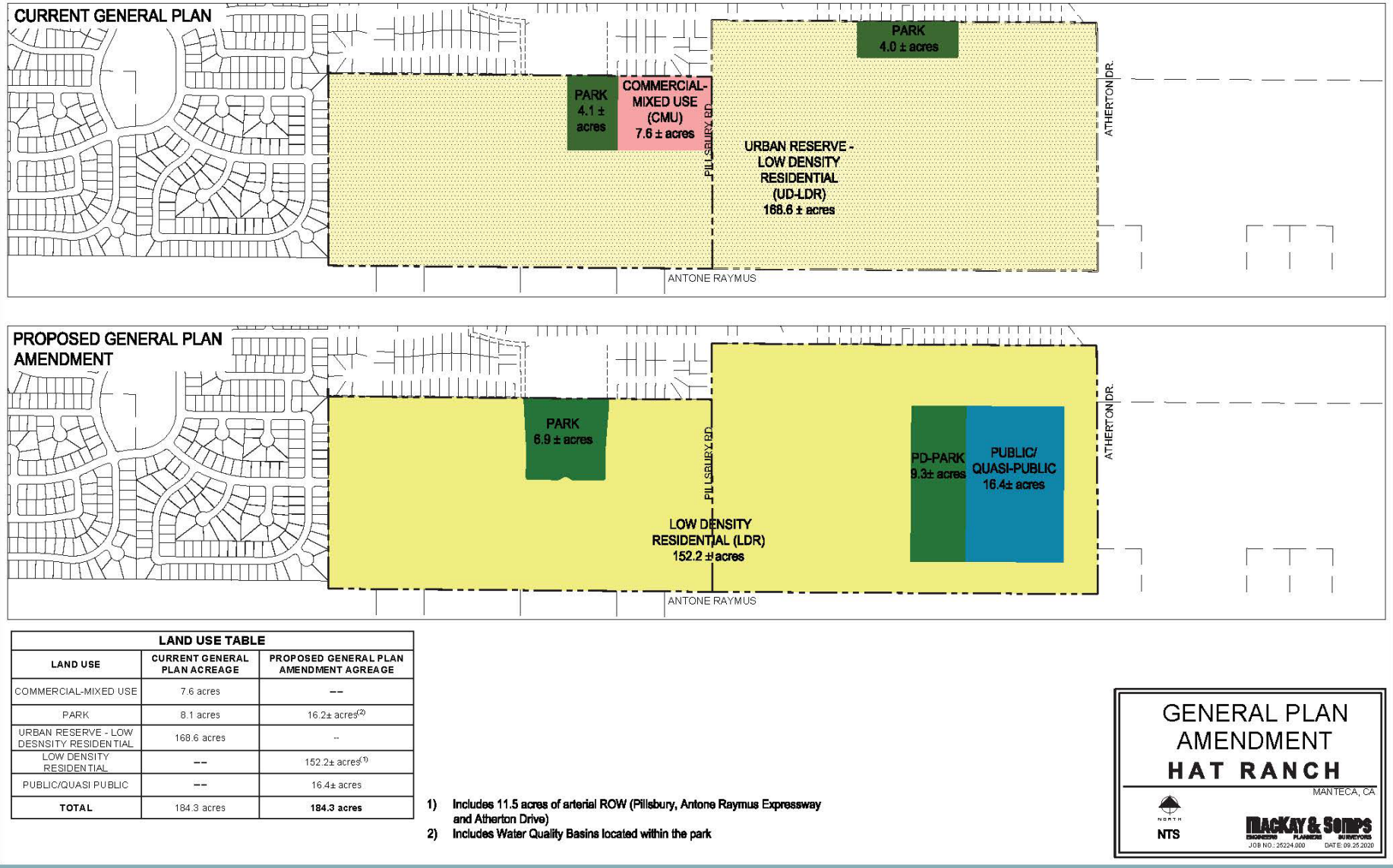
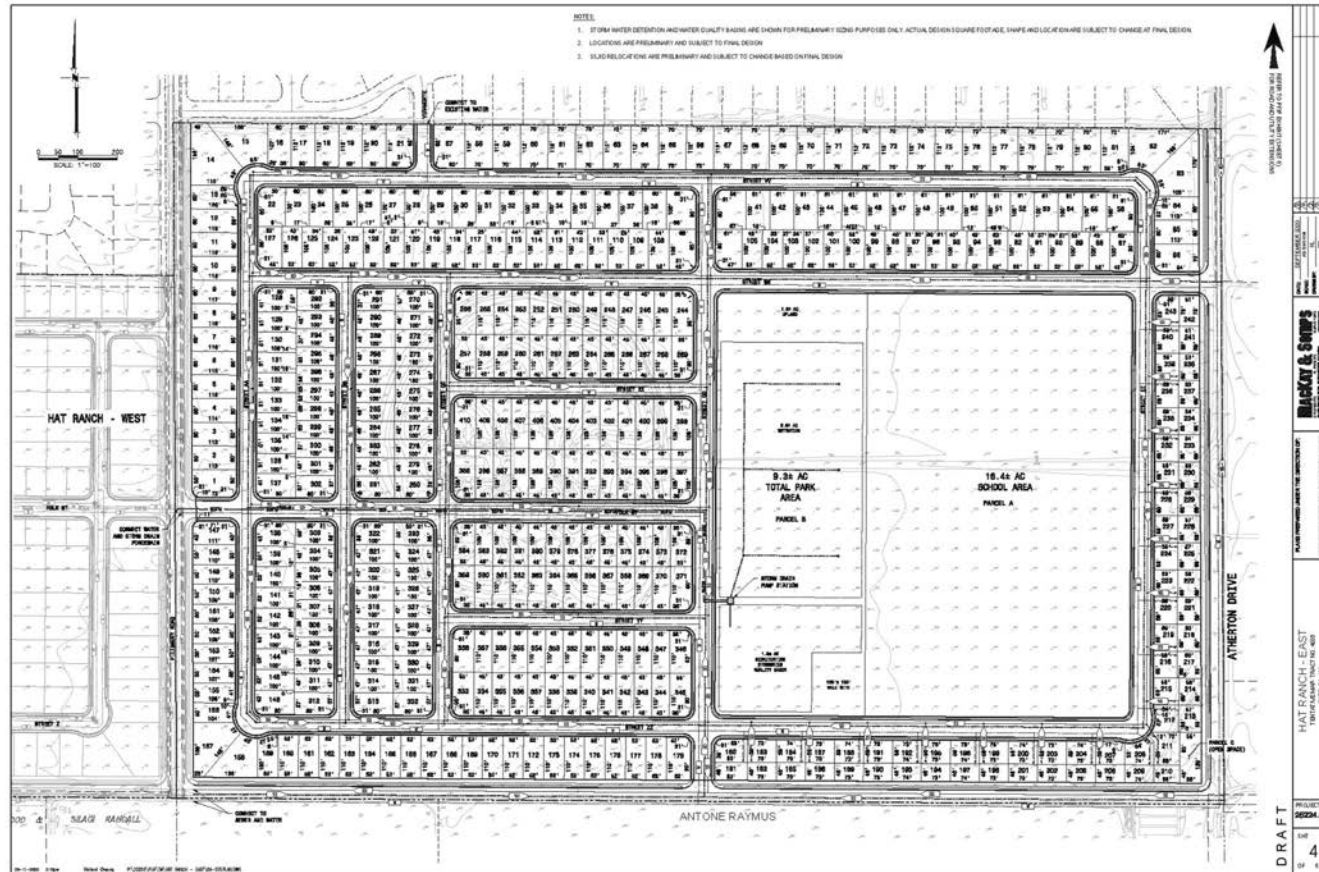
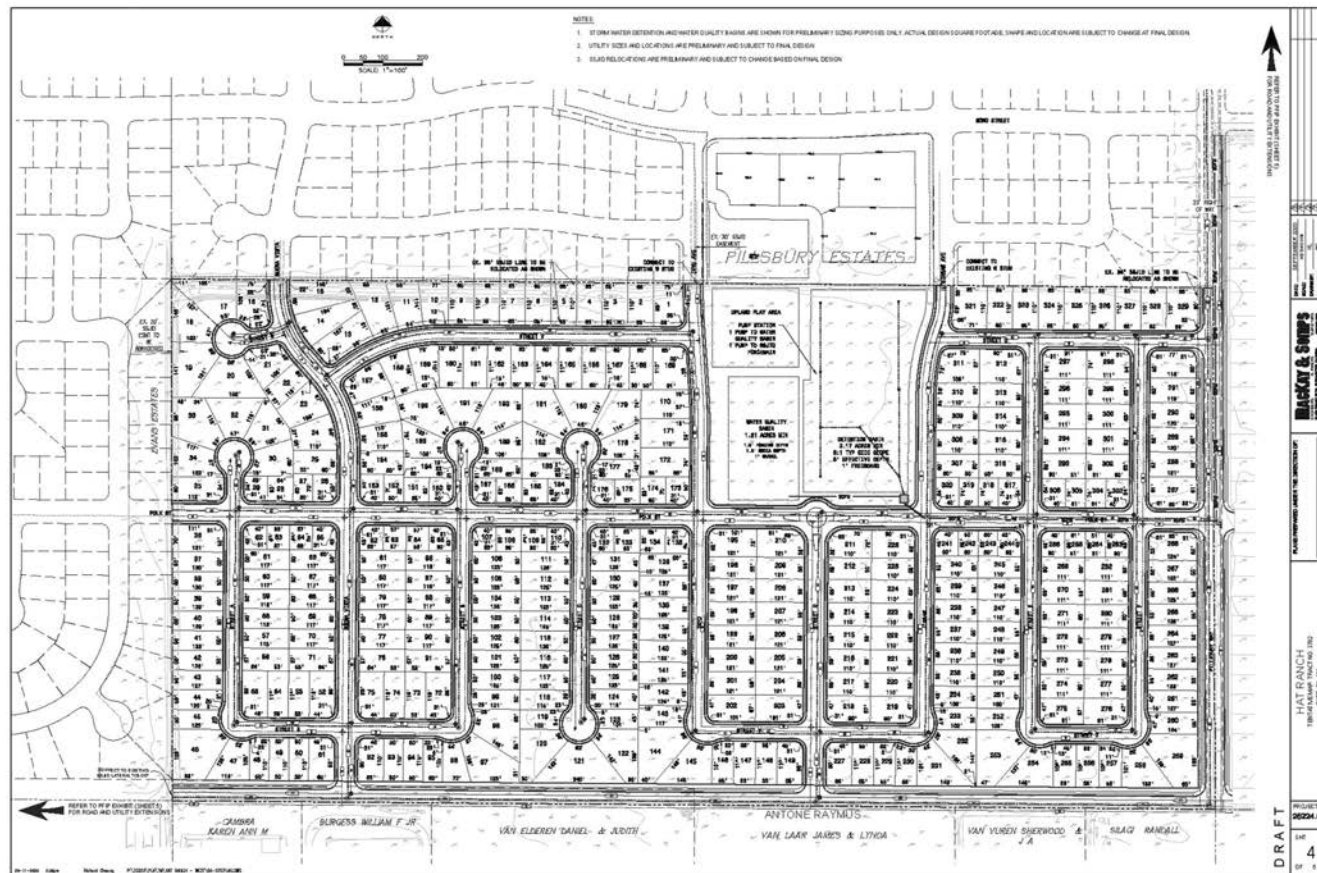


Figure 5
Hat Ranch Tentative Subdivision Map (Eastern Parcel)



Hat Ranch Tentative Subdivision Map (Western Parcel)



APPENDIX B



Jared Blumenfeld
Secretary for
Environmental Protection



Department of Toxic Substances Control

Meredith Williams, Ph.D.
Director
8800 Cal Center Drive
Sacramento, California 95826-3200



Gavin Newsom
Governor

January 25, 2021

Mr. John B. Anderson
Contract Planner
City of Manteca
Community Development Department
1001 West Center Street
Manteca, CA 95337
John@jbandersonplanning.com

NOTICE OF PREPARATION OF AN ENVIRONMENTAL IMPACT REPORT FOR HAT RANCH PROJECT – DATED JANUARY 22, 2021 (STATE CLEARINGHOUSE NUMBER: 2013112049)

Mr. Anderson:

The Department of Toxic Substances Control (DTSC) received a Notice of Preparation of an Environmental Impact Report (EIR) for Hat Ranch Project (Project). The Lead Agency is receiving this notice from DTSC because the Project includes one or more of the following: groundbreaking activities, work in close proximity to a roadway, work in close proximity to mining or suspected mining or former mining activities, presence of site buildings that may require demolition or modifications, importation of backfill soil, and/or work on or in close proximity to an agricultural or former agricultural site.

DTSC recommends that the following issues be evaluated in the EIR Hazards and Hazardous Materials section:

1. The EIR should acknowledge the potential for historic or future activities on or near the project site to result in the release of hazardous wastes/substances on the project site. In instances in which releases have occurred or may occur, further studies should be carried out to delineate the nature and extent of the contamination, and the potential threat to public health and/or the environment should be evaluated. The EIR should also identify the mechanism(s) to initiate any required investigation and/or remediation and the government agency who will be responsible for providing appropriate regulatory oversight.
2. Refiners in the United States started adding lead compounds to gasoline in the 1920s in order to boost octane levels and improve engine performance. This practice did not officially end until 1992 when lead was banned as a fuel additive

in California. Tailpipe emissions from automobiles using leaded gasoline contained lead and resulted in aerially deposited lead (ADL) being deposited in and along roadways throughout the state. ADL-contaminated soils still exist along roadsides and medians and can also be found underneath some existing road surfaces due to past construction activities. Due to the potential for ADL-contaminated soil DTSC, recommends collecting soil samples for lead analysis prior to performing any intrusive activities for the project described in the EIR.

3. If any sites within the project area or sites located within the vicinity of the project have been used or are suspected of having been used for mining activities, proper investigation for mine waste should be discussed in the EIR. DTSC recommends that any project sites with current and/or former mining operations onsite or in the project site area should be evaluated for mine waste according to DTSC's 1998 Abandoned Mine Land Mines Preliminary Assessment Handbook (https://dtsc.ca.gov/wp-content/uploads/sites/31/2018/11/aml_handbook.pdf).
4. If buildings or other structures are to be demolished on any project sites included in the proposed project, surveys should be conducted for the presence of lead-based paints or products, mercury, asbestos containing materials, and polychlorinated biphenyl caulk. Removal, demolition and disposal of any of the above-mentioned chemicals should be conducted in compliance with California environmental regulations and policies. In addition, sampling near current and/or former buildings should be conducted in accordance with DTSC's 2006 *Interim Guidance Evaluation of School Sites with Potential Contamination from Lead Based Paint, Termiticides, and Electrical Transformers* (https://dtsc.ca.gov/wpcontent/uploads/sites/31/2018/09/Guidance_Lead Contamination_050118.pdf).
5. If any projects initiated as part of the proposed project require the importation of soil to backfill any excavated areas, proper sampling should be conducted to ensure that the imported soil is free of contamination. DTSC recommends the imported materials be characterized according to DTSC's 2001 *Information Advisory Clean Imported Fill Material* (https://dtsc.ca.gov/wp-content/uploads/sites/31/2018/09/SMP_FS_Cleanfill-Schools.pdf).
6. If any sites included as part of the proposed project have been used for agricultural, weed abatement or related activities, proper investigation for organochlorinated pesticides should be discussed in the EIR. DTSC recommends the current and former agricultural lands be evaluated in accordance with DTSC's 2008 *Interim Guidance for Sampling Agricultural Properties (Third Revision)* (<https://dtsc.ca.gov/wp-content/uploads/sites/31/2018/09/Ag-Guidance-Rev-3-August-7-2008-2.pdf>).

DTSC appreciates the opportunity to comment on the EIR. Should you need any assistance with an environmental investigation, please submit a request for Lead

Mr. John B. Anderson
January 25, 2021
Page 3

Agency Oversight Application, which can be found at: https://dtsc.ca.gov/wp-content/uploads/sites/31/2018/09/VCP_App-1460.doc. Additional information regarding voluntary agreements with DTSC can be found at: <https://dtsc.ca.gov/brownfields/>.

If you have any questions, please contact me at (916) 255-3710 or via email at Gavin.McCreary@dtsc.ca.gov.

Sincerely,

A handwritten signature in blue ink that reads "Gavin McCreary". The signature is fluid and cursive, with the first name "Gavin" and last name "McCreary" clearly distinguishable.

Gavin McCreary
Project Manager
Site Evaluation and Remediation Unit
Site Mitigation and Restoration Program
Department of Toxic Substances Control

cc: (via email)

Governor's Office of Planning and Research
State Clearinghouse
State.Clearinghouse@opr.ca.gov

Mr. Dave Kereazis
Office of Planning & Environmental Analysis
Department of Toxic Substances Control
Dave.Kereazis@dtsc.ca.gov



JANUARY 29, 2021

VIA EMAIL: JOHN@JBANDERSONPLANNING.COM

John B. Anderson, Contract Planner
Community Development Department
City of Manteca
1001 West Center Street
Manteca, CA 95337

Dear Mr. Anderson:

NOTICE OF PREPARATION OF AN ENVIRONMENTAL IMPACT FOR THE HAT RANCH
PROJECT, SCH# 2013112049

The Department of Conservation's (Department) Division of Land Resource Protection (Division) has reviewed the Notice of Preparation of an Environmental Impact Report for the Hat Ranch Project (Project). The Division monitors farmland conversion on a statewide basis, provides technical assistance regarding the Williamson Act, and administers various agricultural land conservation programs. We offer the following comments and recommendations with respect to the project's potential impacts on agricultural land and resources.

Project Description

The proposed project includes a master planned residential community of up to 739 dwelling units, two neighborhood parks, and a 16.4-acre elementary/middle school located on a project site of approximately 184-acres. The project would allow for the development of 627 traditional single-family detached homes and a unique district of 112 "half-plex" units.

The project would require detachment from the Fire Districts of Lathrop-Manteca and Ripon as well as detachment from the San Joaquin County Resource Conservation District, annexation to the City of Manteca, Pre-zoning, and a General Plan Map Amendment.

A portion of the project site is currently designated as Farmland of Statewide Importance by the Department of Conservation's Farmland Mapping and Monitoring Program.¹

Department Comments

Although conversion of agricultural land is often an unavoidable impact under CEQA analysis, feasible alternatives and/or feasible mitigation measures must be considered. In some cases, the argument is made that mitigation cannot reduce impacts to below the level of significance because agricultural land will still be converted by the project, and therefore, mitigation is not required. However, reduction to a level below significance is not a criterion for mitigation under CEQA. Rather, the criterion is feasible mitigation that lessens a project's impacts. As stated in CEQA statute, mitigation may also include, "Compensating for the impact by replacing or providing substitute resources or environments, including through permanent protection of such resources in the form of conservation easements."²

The conversion of agricultural land represents a permanent reduction in the State's agricultural land resources. As such, the Department advises the use of permanent agricultural conservation easements on land of at least equal quality and size as partial compensation for the loss of agricultural land. Conservation easements are an available mitigation tool and considered a standard practice in many areas of the State. The Department highlights conservation easements because of their acceptance and use by lead agencies as an appropriate mitigation measure under CEQA and because it follows an established rationale similar to that of wildlife habitat mitigation.

Mitigation via agricultural conservation easements can be implemented by at least two alternative approaches: the outright purchase of easements or the donation of mitigation fees to a local, regional, or statewide organization or agency whose purpose includes the acquisition and stewardship of agricultural conservation easements. The conversion of agricultural land should be deemed an impact of at least regional significance. Hence, the search for replacement lands should not be limited strictly to lands within the project's surrounding area.

A source that has proven helpful for regional and statewide agricultural mitigation banks is the California Council of Land Trusts. They provide helpful insight into farmland mitigation policies and implementation strategies, including a guidebook with model policies and a model local ordinance. The guidebook can be found at:

¹ California Department of Conservation, Division of Land Resource Protection, Farmland Mapping and Monitoring Program, <https://maps.conservation.ca.gov/DLRP/CIFF/>

² Public Resources Code Section 15370, Association of Environmental Professionals, 2020 CEQA, California Environmental Quality Act, Statute & Guidelines, page 284, https://www.califaep.org/docs/2020_ceqa_book.pdf

<http://www.calandtrusts.org/resources/conserving-californias-harvest/>

Of course, the use of conservation easements is only one form of mitigation that should be considered. Any other feasible mitigation measures should also be considered.

Conclusion

The Department recommends further discussion of the following issues:

- Type, amount, and location of farmland conversion resulting directly and indirectly from implementation of the proposed project.
- Impacts on any current and future agricultural operations in the vicinity; e.g., land-use conflicts, increases in land values and taxes, loss of agricultural support infrastructure such as processing facilities, etc.
- Incremental impacts leading to cumulative impacts on agricultural land. This would include impacts from the proposed project, as well as impacts from past, current, and likely future projects.
- Proposed mitigation measures for all impacted agricultural lands within the proposed project area.

Thank you for giving us the opportunity to comment on Notice of Preparation of an Environmental Impact Report for the Hat Ranch Project. Please provide this Department with notices of any future hearing dates as well as any staff reports pertaining to this project. If you have any questions regarding our comments, please contact Farl Grundy, Associate Environmental Planner via email at Farl.Grundy@conservation.ca.gov.

Sincerely,

Monique Wilber

Monique Wilber

Conservation Program Support Supervisor



NATIVE AMERICAN HERITAGE COMMISSION

January 25, 2021

John B. Anderson
City of Manteca, Community Development Department
1001 West Center Street
Manteca, CA 95337

Re: 2013112049, Hat Ranch Project, San Joaquin County

Dear Mr. Anderson:

The Native American Heritage Commission (NAHC) has received the Notice of Preparation (NOP), Draft Environmental Impact Report (DEIR) or Early Consultation for the project referenced above. The California Environmental Quality Act (CEQA) (Pub. Resources Code §21000 et seq.), specifically Public Resources Code §21084.1, states that a project that may cause a substantial adverse change in the significance of a historical resource, is a project that may have a significant effect on the environment. (Pub. Resources Code § 21084.1; Cal. Code Regs., tit.14, § 15064.5 (b) (CEQA Guidelines §15064.5 (b))). If there is substantial evidence, in light of the whole record before a lead agency, that a project may have a significant effect on the environment, an Environmental Impact Report (EIR) shall be prepared. (Pub. Resources Code §21080 (d); Cal. Code Regs., tit. 14, § 5064 subd.(a)(1) (CEQA Guidelines §15064 (a)(1))). In order to determine whether a project will cause a substantial adverse change in the significance of a historical resource, a lead agency will need to determine whether there are historical resources within the area of potential effect (APE).

CEQA was amended significantly in 2014. Assembly Bill 52 (Gatto, Chapter 532, Statutes of 2014) (AB 52) amended CEQA to create a separate category of cultural resources, "tribal cultural resources" (Pub. Resources Code §21074) and provides that a project with an effect that may cause a substantial adverse change in the significance of a tribal cultural resource is a project that may have a significant effect on the environment. (Pub. Resources Code §21084.2). Public agencies shall, when feasible, avoid damaging effects to any tribal cultural resource. (Pub. Resources Code §21084.3 (a)). **AB 52 applies to any project for which a notice of preparation, a notice of negative declaration, or a mitigated negative declaration is filed on or after July 1, 2015.** If your project involves the adoption of or amendment to a general plan or a specific plan, or the designation or proposed designation of open space, on or after March 1, 2005, it may also be subject to Senate Bill 18 (Burton, Chapter 905, Statutes of 2004) (SB 18). **Both SB 18 and AB 52 have tribal consultation requirements.** If your project is also subject to the federal National Environmental Policy Act (42 U.S.C. § 4321 et seq.) (NEPA), the tribal consultation requirements of Section 106 of the National Historic Preservation Act of 1966 (154 U.S.C. 300101, 36 C.F.R. §800 et seq.) may also apply.

The NAHC recommends consultation with California Native American tribes that are traditionally and culturally affiliated with the geographic area of your proposed project as early as possible in order to avoid inadvertent discoveries of Native American human remains and best protect tribal cultural resources. Below is a brief summary of portions of AB 52 and SB 18 as well as the NAHC's recommendations for conducting cultural resources assessments.

Consult your legal counsel about compliance with AB 52 and SB 18 as well as compliance with any other applicable laws.

CHAIRPERSON
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AB 52 has added to CEQA the additional requirements listed below, along with many other requirements:

1. Fourteen Day Period to Provide Notice of Completion of an Application/Decision to Undertake a Project:

Within fourteen (14) days of determining that an application for a project is complete or of a decision by a public agency to undertake a project, a lead agency shall provide formal notification to a designated contact of, or tribal representative of, traditionally and culturally affiliated California Native American tribes that have requested notice, to be accomplished by at least one written notice that includes:

- a. A brief description of the project.
- b. The lead agency contact information.
- c. Notification that the California Native American tribe has 30 days to request consultation. (Pub. Resources Code §21080.3.1 (d)).
- d. A "California Native American tribe" is defined as a Native American tribe located in California that is on the contact list maintained by the NAHC for the purposes of Chapter 905 of Statutes of 2004 (SB 18). (Pub. Resources Code §21073).

2. Begin Consultation Within 30 Days of Receiving a Tribe's Request for Consultation and Before Releasing a Negative Declaration, Mitigated Negative Declaration, or Environmental Impact Report: A lead agency shall begin the consultation process within 30 days of receiving a request for consultation from a California Native American tribe that is traditionally and culturally affiliated with the geographic area of the proposed project. (Pub. Resources Code §21080.3.1, subds. (d) and (e)) and prior to the release of a negative declaration, mitigated negative declaration or Environmental Impact Report. (Pub. Resources Code §21080.3.1 (b)).

- a. For purposes of AB 52, "consultation shall have the same meaning as provided in Gov. Code §65352.4 (SB 18). (Pub. Resources Code §21080.3.1 (b)).

3. Mandatory Topics of Consultation If Requested by a Tribe: The following topics of consultation, if a tribe requests to discuss them, are mandatory topics of consultation:

- a. Alternatives to the project.
- b. Recommended mitigation measures.
- c. Significant effects. (Pub. Resources Code §21080.3.2 (a)).

4. Discretionary Topics of Consultation: The following topics are discretionary topics of consultation:

- a. Type of environmental review necessary.
- b. Significance of the tribal cultural resources.
- c. Significance of the project's impacts on tribal cultural resources.
- d. If necessary, project alternatives or appropriate measures for preservation or mitigation that the tribe may recommend to the lead agency. (Pub. Resources Code §21080.3.2 (a)).

5. Confidentiality of Information Submitted by a Tribe During the Environmental Review Process: With some exceptions, any information, including but not limited to, the location, description, and use of tribal cultural resources submitted by a California Native American tribe during the environmental review process shall not be included in the environmental document or otherwise disclosed by the lead agency or any other public agency to the public, consistent with Government Code §6254 (r) and §6254.10. Any information submitted by a California Native American tribe during the consultation or environmental review process shall be published in a confidential appendix to the environmental document unless the tribe that provided the information consents, in writing, to the disclosure of some or all of the information to the public. (Pub. Resources Code §21082.3 (c)(1)).

6. Discussion of Impacts to Tribal Cultural Resources in the Environmental Document: If a project may have a significant impact on a tribal cultural resource, the lead agency's environmental document shall discuss both of the following:

- a. Whether the proposed project has a significant impact on an identified tribal cultural resource.
- b. Whether feasible alternatives or mitigation measures, including those measures that may be agreed to pursuant to Public Resources Code §21082.3, subdivision (a), avoid or substantially lessen the impact on the identified tribal cultural resource. (Pub. Resources Code §21082.3 (b)).

- 7. Conclusion of Consultation:** Consultation with a tribe shall be considered concluded when either of the following occurs:
- a.** The parties agree to measures to mitigate or avoid a significant effect, if a significant effect exists, on a tribal cultural resource; or
 - b.** A party, acting in good faith and after reasonable effort, concludes that mutual agreement cannot be reached. (Pub. Resources Code §21080.3.2 (b)).
- 8. Recommending Mitigation Measures Agreed Upon in Consultation in the Environmental Document:** Any mitigation measures agreed upon in the consultation conducted pursuant to Public Resources Code §21080.3.2 shall be recommended for inclusion in the environmental document and in an adopted mitigation monitoring and reporting program, if determined to avoid or lessen the impact pursuant to Public Resources Code §21082.3, subdivision (b), paragraph 2, and shall be fully enforceable. (Pub. Resources Code §21082.3 (a)).
- 9. Required Consideration of Feasible Mitigation:** If mitigation measures recommended by the staff of the lead agency as a result of the consultation process are not included in the environmental document or if there are no agreed upon mitigation measures at the conclusion of consultation, or if consultation does not occur, and if substantial evidence demonstrates that a project will cause a significant effect to a tribal cultural resource, the lead agency shall consider feasible mitigation pursuant to Public Resources Code §21084.3 (b). (Pub. Resources Code §21082.3 (e)).
- 10. Examples of Mitigation Measures That, If Feasible, May Be Considered to Avoid or Minimize Significant Adverse Impacts to Tribal Cultural Resources:**
- a.** Avoidance and preservation of the resources in place, including, but not limited to:
 - i.** Planning and construction to avoid the resources and protect the cultural and natural context.
 - ii.** Planning greenspace, parks, or other open space, to incorporate the resources with culturally appropriate protection and management criteria.
 - b.** Treating the resource with culturally appropriate dignity, taking into account the tribal cultural values and meaning of the resource, including, but not limited to, the following:
 - i.** Protecting the cultural character and integrity of the resource.
 - ii.** Protecting the traditional use of the resource.
 - iii.** Protecting the confidentiality of the resource.
 - c.** Permanent conservation easements or other interests in real property, with culturally appropriate management criteria for the purposes of preserving or utilizing the resources or places.
 - d.** Protecting the resource. (Pub. Resource Code §21084.3 (b)).
 - e.** Please note that a federally recognized California Native American tribe or a non-federally recognized California Native American tribe that is on the contact list maintained by the NAHC to protect a California prehistoric, archaeological, cultural, spiritual, or ceremonial place may acquire and hold conservation easements if the conservation easement is voluntarily conveyed. (Civ. Code §815.3 (c)).
 - f.** Please note that it is the policy of the state that Native American remains and associated grave artifacts shall be repatriated. (Pub. Resources Code §5097.991).
- 11. Prerequisites for Certifying an Environmental Impact Report or Adopting a Mitigated Negative Declaration or Negative Declaration with a Significant Impact on an Identified Tribal Cultural Resource:** An Environmental Impact Report may not be certified, nor may a mitigated negative declaration or a negative declaration be adopted unless one of the following occurs:
- a.** The consultation process between the tribes and the lead agency has occurred as provided in Public Resources Code §21080.3.1 and §21080.3.2 and concluded pursuant to Public Resources Code §21080.3.2.
 - b.** The tribe that requested consultation failed to provide comments to the lead agency or otherwise failed to engage in the consultation process.
 - c.** The lead agency provided notice of the project to the tribe in compliance with Public Resources Code §21080.3.1 (d) and the tribe failed to request consultation within 30 days. (Pub. Resources Code §21082.3 (d)).

The NAHC's PowerPoint presentation titled, "Tribal Consultation Under AB 52: Requirements and Best Practices" may be found online at: http://nahc.ca.gov/wp-content/uploads/2015/10/AB52TribalConsultation_CalEPAPDF.pdf

SB 18

SB 18 applies to local governments and requires local governments to contact, provide notice to, refer plans to, and consult with tribes prior to the adoption or amendment of a general plan or a specific plan, or the designation of open space. (Gov. Code §65352.3). Local governments should consult the Governor's Office of Planning and Research's "Tribal Consultation Guidelines," which can be found online at: https://www.opr.ca.gov/docs/09_14_05_Updated_Guidelines_922.pdf.

Some of SB 18's provisions include:

1. Tribal Consultation: If a local government considers a proposal to adopt or amend a general plan or a specific plan, or to designate open space it is required to contact the appropriate tribes identified by the NAHC by requesting a "Tribal Consultation List." If a tribe, once contacted, requests consultation the local government must consult with the tribe on the plan proposal. **A tribe has 90 days from the date of receipt of notification to request consultation unless a shorter timeframe has been agreed to by the tribe.** (Gov. Code §65352.3 (a)(2)).
2. No Statutory Time Limit on SB 18 Tribal Consultation. There is no statutory time limit on SB 18 tribal consultation.
3. Confidentiality: Consistent with the guidelines developed and adopted by the Office of Planning and Research pursuant to Gov. Code §65040.2, the city or county shall protect the confidentiality of the information concerning the specific identity, location, character, and use of places, features and objects described in Public Resources Code §5097.9 and §5097.993 that are within the city's or county's jurisdiction. (Gov. Code §65352.3 (b)).
4. Conclusion of SB 18 Tribal Consultation: Consultation should be concluded at the point in which:
 - a. The parties to the consultation come to a mutual agreement concerning the appropriate measures for preservation or mitigation; or
 - b. Either the local government or the tribe, acting in good faith and after reasonable effort, concludes that mutual agreement cannot be reached concerning the appropriate measures of preservation or mitigation. (Tribal Consultation Guidelines, Governor's Office of Planning and Research (2005) at p. 18).

Agencies should be aware that neither AB 52 nor SB 18 precludes agencies from initiating tribal consultation with tribes that are traditionally and culturally affiliated with their jurisdictions before the timeframes provided in AB 52 and SB 18. For that reason, we urge you to continue to request Native American Tribal Contact Lists and "Sacred Lands File" searches from the NAHC. The request forms can be found online at: <http://nahc.ca.gov/resources/forms/>.

NAHC Recommendations for Cultural Resources Assessments

To adequately assess the existence and significance of tribal cultural resources and plan for avoidance, preservation in place, or barring both, mitigation of project-related impacts to tribal cultural resources, the NAHC recommends the following actions:

1. Contact the appropriate regional California Historical Research Information System (CHRIS) Center (http://ohp.parks.ca.gov/?page_id=1068) for an archaeological records search. The records search will determine:
 - a. If part or all of the APE has been previously surveyed for cultural resources.
 - b. If any known cultural resources have already been recorded on or adjacent to the APE.
 - c. If the probability is low, moderate, or high that cultural resources are located in the APE.
 - d. If a survey is required to determine whether previously unrecorded cultural resources are present.
2. If an archaeological inventory survey is required, the final stage is the preparation of a professional report detailing the findings and recommendations of the records search and field survey.
 - a. The final report containing site forms, site significance, and mitigation measures should be submitted immediately to the planning department. All information regarding site locations, Native American human remains, and associated funerary objects should be in a separate confidential addendum and not be made available for public disclosure.
 - b. The final written report should be submitted within 3 months after work has been completed to the appropriate regional CHRIS center.

3. Contact the NAHC for:

- a.** A Sacred Lands File search. Remember that tribes do not always record their sacred sites in the Sacred Lands File, nor are they required to do so. A Sacred Lands File search is not a substitute for consultation with tribes that are traditionally and culturally affiliated with the geographic area of the project's APE.
- b.** A Native American Tribal Consultation List of appropriate tribes for consultation concerning the project site and to assist in planning for avoidance, preservation in place, or, failing both, mitigation measures.

4. Remember that the lack of surface evidence of archaeological resources (including tribal cultural resources) does not preclude their subsurface existence.

- a.** Lead agencies should include in their mitigation and monitoring reporting program plan provisions for the identification and evaluation of inadvertently discovered archaeological resources per Cal. Code Regs., tit. 14, § 15064.5(f) (CEQA Guidelines § 15064.5(f)). In areas of identified archaeological sensitivity, a certified archaeologist and a culturally affiliated Native American with knowledge of cultural resources should monitor all ground-disturbing activities.
- b.** Lead agencies should include in their mitigation and monitoring reporting program plans provisions for the disposition of recovered cultural items that are not burial associated in consultation with culturally affiliated Native Americans.
- c.** Lead agencies should include in their mitigation and monitoring reporting program plans provisions for the treatment and disposition of inadvertently discovered Native American human remains. Health and Safety Code § 7050.5, Public Resources Code § 5097.98, and Cal. Code Regs., tit. 14, § 15064.5, subdivisions (d) and (e) (CEQA Guidelines § 15064.5, subds. (d) and (e)) address the processes to be followed in the event of an inadvertent discovery of any Native American human remains and associated grave goods in a location other than a dedicated cemetery.

If you have any questions or need additional information, please contact me at my email address: Nancy.Gonzalez-Lopez@nahc.ca.gov.

Sincerely,



Nancy Gonzalez-Lopez
Cultural Resources Analyst

cc: State Clearinghouse

Central Valley Regional Water Quality Control Board

22 February 2021

John B. Anderson
City of Manteca
1001 West Center Street
Manteca, CA 95337

COMMENTS TO REQUEST FOR REVIEW FOR THE NOTICE OF PREPARATION FOR THE DRAFT ENVIRONMENTAL IMPACT REPORT, HAT RANCH PROJECT, SCH#2013112049, SAN JOAQUIN COUNTY

Pursuant to the State Clearinghouse's 22 January 2021 request, the Central Valley Regional Water Quality Control Board (Central Valley Water Board) has reviewed the *Request for Review for the Notice of Preparation for the Draft Environmental Impact Report* for the Hat Ranch Project, located in San Joaquin County.

Our agency is delegated with the responsibility of protecting the quality of surface and groundwaters of the state; therefore our comments will address concerns surrounding those issues.

I. Regulatory Setting

Basin Plan

The Central Valley Water Board is required to formulate and adopt Basin Plans for all areas within the Central Valley region under Section 13240 of the Porter-Cologne Water Quality Control Act. Each Basin Plan must contain water quality objectives to ensure the reasonable protection of beneficial uses, as well as a program of implementation for achieving water quality objectives with the Basin Plans. Federal regulations require each state to adopt water quality standards to protect the public health or welfare, enhance the quality of water and serve the purposes of the Clean Water Act. In California, the beneficial uses, water quality objectives, and the Antidegradation Policy are the State's water quality standards. Water quality standards are also contained in the National Toxics Rule, 40 CFR Section 131.36, and the California Toxics Rule, 40 CFR Section 131.38.

The Basin Plan is subject to modification as necessary, considering applicable laws, policies, technologies, water quality conditions and priorities. The original Basin Plans were adopted in 1975, and have been updated and revised periodically as required, using Basin Plan amendments. Once the Central Valley Water Board has adopted a Basin Plan amendment in noticed public hearings, it must be approved by the State Water Resources Control Board (State Water Board), Office of Administrative Law (OAL) and in some cases, the United States Environmental

KARL E. LONGLEY SCD, P.E., CHAIR | PATRICK PULUPA, ESQ., EXECUTIVE OFFICER

Protection Agency (USEPA). Basin Plan amendments only become effective after they have been approved by the OAL and in some cases, the USEPA. Every three (3) years, a review of the Basin Plan is completed that assesses the appropriateness of existing standards and evaluates and prioritizes Basin Planning issues. For more information on the *Water Quality Control Plan for the Sacramento and San Joaquin River Basins*, please visit our website:

http://www.waterboards.ca.gov/centralvalley/water_issues/basin_plans/

Antidegradation Considerations

All wastewater discharges must comply with the Antidegradation Policy (State Water Board Resolution 68-16) and the Antidegradation Implementation Policy contained in the Basin Plan. The Antidegradation Implementation Policy is available on page 74 at:

https://www.waterboards.ca.gov/centralvalley/water_issues/basin_plans/sacsjr_2018_05.pdf

In part it states:

Any discharge of waste to high quality waters must apply best practicable treatment or control not only to prevent a condition of pollution or nuisance from occurring, but also to maintain the highest water quality possible consistent with the maximum benefit to the people of the State.

This information must be presented as an analysis of the impacts and potential impacts of the discharge on water quality, as measured by background concentrations and applicable water quality objectives.

The antidegradation analysis is a mandatory element in the National Pollutant Discharge Elimination System and land discharge Waste Discharge Requirements (WDRs) permitting processes. The environmental review document should evaluate potential impacts to both surface and groundwater quality.

II. Permitting Requirements

Construction Storm Water General Permit

Dischargers whose project disturb one or more acres of soil or where projects disturb less than one acre but are part of a larger common plan of development that in total disturbs one or more acres, are required to obtain coverage under the General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities (Construction General Permit), Construction General Permit Order No. 2009-0009-DWQ. Construction activity subject to this permit includes clearing, grading, grubbing, disturbances to the ground, such as stockpiling, or excavation, but does not include regular maintenance activities performed to restore the original line, grade, or capacity of the facility. The Construction General Permit requires the development and implementation of a Storm Water Pollution Prevention Plan (SWPPP). For more information on the Construction General Permit, visit the State Water Resources Control Board website at:

http://www.waterboards.ca.gov/water_issues/programs/stormwater/constpermits.shtml

Phase I and II Municipal Separate Storm Sewer System (MS4) Permits¹

The Phase I and II MS4 permits require the Permittees reduce pollutants and runoff flows from new development and redevelopment using Best Management Practices (BMPs) to the maximum extent practicable (MEP). MS4 Permittees have their own development standards, also known as Low Impact Development (LID)/post-construction standards that include a hydromodification component. The MS4 permits also require specific design concepts for LID/post-construction BMPs in the early stages of a project during the entitlement and CEQA process and the development plan review process.

For more information on which Phase I MS4 Permit this project applies to, visit the Central Valley Water Board website at:

http://www.waterboards.ca.gov/centralvalley/water_issues/storm_water/municipal_permits/

For more information on the Phase II MS4 permit and who it applies to, visit the State Water Resources Control Board at:

http://www.waterboards.ca.gov/water_issues/programs/stormwater/phase_ii_municipal.shtml

Dewatering Permit

If the proposed project includes construction or groundwater dewatering to be discharged to land, the proponent may apply for coverage under State Water Board General Water Quality Order (Low Threat General Order) 2003-0003 or the Central Valley Water Board's Waiver of Report of Waste Discharge and Waste Discharge Requirements (Low Threat Waiver) R5-2018-0085. Small temporary construction dewatering projects are projects that discharge groundwater to land from excavation activities or dewatering of underground utility vaults. Dischargers seeking coverage under the General Order or Waiver must file a Notice of Intent with the Central Valley Water Board prior to beginning discharge.

For more information regarding the Low Threat General Order and the application process, visit the Central Valley Water Board website at:

http://www.waterboards.ca.gov/board_decisions/adopted_orders/water_quality/2003/wqo/wqo2003-0003.pdf

For more information regarding the Low Threat Waiver and the application process, visit the Central Valley Water Board website at:

https://www.waterboards.ca.gov/centralvalley/board_decisions/adopted_orders/waivers/r5-2018-0085.pdf

¹ Municipal Permits = The Phase I Municipal Separate Storm Water System (MS4) Permit covers medium sized Municipalities (serving between 100,000 and 250,000 people) and large sized municipalities (serving over 250,000 people). The Phase II MS4 provides coverage for small municipalities, including non-traditional Small MS4s, which include military bases, public campuses, prisons and hospitals.

Limited Threat General NPDES Permit

If the proposed project includes construction dewatering and it is necessary to discharge the groundwater to waters of the United States, the proposed project will require coverage under a National Pollutant Discharge Elimination System (NPDES) permit. Dewatering discharges are typically considered a low or limited threat to water quality and may be covered under the General Order for *Limited Threat Discharges to Surface Water* (Limited Threat General Order). A complete Notice of Intent must be submitted to the Central Valley Water Board to obtain coverage under the Limited Threat General Order. For more information regarding the Limited Threat General Order and the application process, visit the Central Valley Water Board website at:

https://www.waterboards.ca.gov/centralvalley/board_decisions/adopted_orders/general_orders/r5-2016-0076-01.pdf

NPDES Permit

If the proposed project discharges waste that could affect the quality of surface waters of the State, other than into a community sewer system, the proposed project will require coverage under a National Pollutant Discharge Elimination System (NPDES) permit. A complete Report of Waste Discharge must be submitted with the Central Valley Water Board to obtain a NPDES Permit. For more information regarding the NPDES Permit and the application process, visit the Central Valley Water Board website at: <https://www.waterboards.ca.gov/centralvalley/help/permit/>

If you have questions regarding these comments, please contact me at (916) 464-4856 or Nicholas.White@waterboards.ca.gov.



Nicholas White
Water Resource Control Engineer

cc: State Clearinghouse unit, Governor's Office of Planning and Research,
Sacramento

Anthony and Kristin Salinas
1436 Freestone Road
Manteca, CA 95337
650-302-9796

February 18, 2021

Hi John,

Thank you for the meeting last week and handling the public comments.

Our family currently lives in the Atherton Homes: Solera neighborhood, currently residing on Freestone Road, which means the Hat Mansion is our backyard. When purchasing our home, we understood that, at some point, the Hat Mansion area would be developed. We are hoping that it be developed with the same mindset as the Atherton Homes in the Solera community: safe, quiet neighborhoods and a family-oriented culture. These are core traits to lasting, prosperous communities, the kind we grew up in and the kind that draws good people to the city of Manteca in the first place. Providing and maintaining this type of environment should drive the city's decisions now and in the future.

The City of Manteca currently has a lot of projects that are outstanding and need a lot of attention. To name a few: our streets need repairs and upgraded traffic controls. Our water quality is severely concerning. Our police and fire stations and other infrastructure need upgrades and expansions. It is concerning that Manteca is not putting the city first and annexing additional land that we really cannot support.

Impact of Traffic to surrounding Neighborhood(s)

The roads leading in and out of this huge Hat Mansion Project are narrow and wind through a residential neighborhood. Pillsbury, Heartland, Tannehill, Polk, and Mono would become main roads for getting in and out of the neighborhood. Our children walk and ride bikes through these sidewalks every day, and we have observed the impact of traffic from the existing homes; adding thousands more cars to these streets will add noise pollution and greatly reduce safety around the neighborhood.

The City of Manteca recently declined a new business to be built due to traffic issues.¹ The report made to the city council should accurately and fairly present the impacts on traffic that this proposed development will bring. Any new development to our south should have its own ingress and egress, rather than pouring incredible amounts of additional traffic into our neighborhoods. The impact study needs to take this into account.

¹ [PLANNERS SAYING NO TO ROTTEN ROBBIE'S - Manteca Bulletin](https://www.mantecabulletin.com/news/local-news/planners-saying-no-to-rotten-robbies/)

<https://www.mantecabulletin.com/news/local-news/planners-saying-no-to-rotten-robbies/>

Local infrastructure

As shared by the others on the call, driving to Highway 99 along Woodward and Moffat is challenging. Traffic congestion backs up both roads every day and adding more drivers will only make the problem worse. Along the way, the road is torn up with potholes and uneven surface. There are dozens of “Semi” trucks and trailers parked along Moffat (the drivers live in our neighborhood). Traffic exiting the freeway generally ignores the (high) speed limit. All of which makes turning hazardous. The train crossing has seen an increase in the freight traffic as well which blocks the intersection making the three-way stop even more dangerous, especially to impatient drivers. These are country roads that were never designed to handle the amount of traffic going through. That intersection (as well as others) needs to be updated before our City considers annexing MORE land and building more homes.

Master Plan of the Hat Mansion Project

The masterplan needs work. We want a community that families can safely walk around and enjoy. Any new project should integrate into the existing community rather than offer a sharp contrast in street layouts and structure designs. New developments should maintain or improve the existing neighborhood and community, but this proposed project seeks to destroy the safety of the neighborhood and devalue the existing properties in the surrounding communities. The proposed Hat Ranch project does not maintain standards from what the other builders have used, here and in other developments throughout the city.

Specific concerns regarding building against the current homes that are in place:

- **Proposed Home Designs**
 - The majority of the existing homes along Freestone, Mono, Pillsbury, and the other streets which border the proposed Hat Ranch development area are single-story homes on large lots. Any new builds should mirror the existing neighborhood. Two-story homes to the south of single-story homes will reduce the visible horizon from those existing structures, impacting the amount of sunlight, privacy, and security the existing homes currently afford residents.
 - Additionally, “a unique district of 112 half-plex units” have been proposed. Higher density and exceedingly small sized lots in comparison to existing surrounding developments are planned for this project. Higher density housing will bring additional traffic and impacts on an already weakened infrastructure. The existing communities already added to the draws on the city’s power, water, garbage services, and telecommunications. More people in small spaces adds to the concern for fire safety. Half-plexes are completely out of character for the area with respect to design and value for the space. There should be consideration for the existing neighborhoods and property values. We should not be deviating from the current zoning standards.

- Parking is a huge issue. Will there be a parking structure to house all of the cars for the high density areas? Where will it be located and can you please provide an updated masterplan showing where everyone will park?
- HOA – We need living standards around the neighborhood.
- In either the HOA or CCNR's, none of these homes should be allowed to be rented for at least 2 years. All must maintain ownership for life in the affordable homes.
- Need for Green Belts
 - The plans for the Hat Ranch development do not appear to include green belts, walkways, and bike paths for community use. The existing neighborhoods to the north of the project include these areas. The developer should be required to continue/add to these areas in order to maintain the standards of the existing communities. Considering the traffic impacts, it is imperative to have safe, separated bike paths and walking paths.
- Roads Do Not Match Existing Design
 - The proposed design of new streets does not account for impacts on traffic and parking. The proposed neighborhood has a very linear design; community members have called it a “prison” and “boxy.” The existing neighborhoods include streets with many curves, wide sidewalks, and ample spaces of additional parking (along fence lines and green belts, not just the spaces in front of homes, for example). The proposed design appears to pack rows of homes on small lots without providing the parking spaces to accommodate modern car ownership (most households owning an average of two to three cars). Cars will crowd the streets and driveways, reducing accessibility for pedestrians and bicyclists. Straight, long streets will encourage speeding and reduce safety for the families in the area with children who may wish to play in front of their homes.
- Need for Walls
 - There are many areas in the city where developments are separated each other by wide avenues and walls with green space and walkways. This provides separation and protects the property values of each development by separating the residential traffic from through traffic, allowing for privacy for those on the borders of the different developments, and creating a visual marker around a neighborhood. The developer proposing to build on the Hat Mansion property has included atypical structures on smaller lots throughout the property, contradictory to all existing lots and homes in the surrounding neighborhoods. If such a neighborhood is to exist along the southern border of Manteca, there should be a clear division between existing communities, with a wall, green space, and a wide street, similar to the current wall and street design of Atherton Drive or the Tesoro neighborhood around Van Ryn Avenue. A wall would minimize the dust around the existing homes during construction and mitigate the noise from the additional traffic.

- Proposed School Site

- The proposal for development of the Hat Mansion property includes a school that would become part of the Ripon USD. There is no concrete plan for funding of the school build, which leads to an assumption that bonds would need to be raised. Current residents of the surrounding neighborhoods and the city of Ripon would be taxed for the school. The city of Manteca, especially in its dire financial situation, should not encourage any building of public facilities without the developer taking fiscal responsibility. There is no reason to tax residents for a future school site.
- Where in the master plan does it show the parking available for the proposed school campus? The parking lot as well as any pick up and drop off areas must be designed to maximize safety and minimize traffic back-ups around the neighborhood.
- The proposed school site is situated amongst residential streets without respect to the increase in traffic around the existing neighborhoods. RUSD is currently considered one attendance area, meaning that traffic from the new neighborhood would mix with traffic coming from southern Manteca and the city of Ripon as families from the entire district travel to and from this school. The current “main” inlet into the community and the school site, Pillsbury Road, is not equipped to handle the increase in car and school bus traffic.

- Needed Roads

- The proposed development is planned for a “future” expressway along the southern boundary of the project. The city has no means to finance the construction and maintenance of this road, yet, if this development is built, the road is essential to alleviating the traffic congestion around the existing neighborhoods.
- The two main roads that are proposed as entrances into the project site, Pillsbury and Atherton, will need to be extended into the new neighborhood. Again, the city has no means of funding construction, and, as previously stated, both roads are one-lane in and one-lane out, with large, established medians on Pillsbury Road. The amount of traffic, first from construction crews and later from new residents, will overwhelm these two roadways, leading traffic to enter the surrounding existing neighborhoods, reducing safety.

- Current Infrastructure and City Services Lacking

- The city currently provides unsafe drinking water to residents.
- The city currently has flood control issues and aging levees.
- The city currently lacks adequate police and fire protection for the current and future residents.

- The City of Manteca requires resources and financial assistance to provide for those residing within the existing boundaries of the city. The city should not be annexing land without the resources to support new residents.

The impact study should explain to the planning department that the rapid growth of our residential areas has resulted in the heavy use of roads that were not designed to handle the additional housing growth. We have a lot of work ahead of us to fix our current roadways, water, and other services, and keeping this a safe environment for our families. The proposed development, as planned, will destroy our neighborhood streets, driving in and out, tax our city services with additional residents clamoring for resources, and degrade the peaceful, safe, family-friendly community that currently exists. This is not what we all signed up for.

One last thought as I know this was a lot to take in. What about turning the area into a golf course and using the Hat Mansion as a club house or venue for weddings. The Hat Mansion is a landmark and one day will probably be historic and the surrounding areas would love to support it.

We look forward to hearing from you.

Anthony Salinas

Kristin Salinas

Other residents in our neighborhood that agree and are signing this document:

All residents are located here in Manteca, CA.

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-----Original Message-----

From: Billy <billf150@sbcglobal.net>

Sent: Tuesday, February 23, 2021 12:50 PM

To: john@jbandersonplanning.com

Subject: Mansion

Don't tear down mansion, turn it into a museum to create money for the city of Manteca. The city is getting over crowded with homes and traffic and with that comes crime and mayhem. If torn down replace it with something like a family fun center arcade, roller skating, miniature golf course to create more money for the city of Manteca. Here's one idea turn it into a police precinct.

Sent from my iPad

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From: Catherine Quintana <quintanacatherine13@gmail.com>

Sent: Wednesday, January 27, 2021 6:34 PM

To: john@jbandersonplanning.com

Subject:

This would flood our schools and bring way to much traffic to pillburry rd where I just bought my dream house because it was a medium size area but if you build 700 plus home it would take away from the quite nice Neighborhood we bought here for. Please think of something else to hold on to the Hat Mansion.

Thank you

This email has been scanned for spam and viruses by Proofpoint Essentials. Click [here](#) to report this email as spam.

From: Cindy Weese <weesecindy@sbcglobal.net>

Sent: Sunday, February 7, 2021 3:19 PM

To: john@jbandersonplanning.com

Subject: NOP of preparation of an EIR for proposed Hat Ranch project

Dear John Anderson,

Thank you for the opportunity to provide comments and for arranging the public scoping meeting for the EIR for the Hat Ranch Project.

My name is Cindy Weese and I am a resident of Manteca. I live on Pillsbury Road in the Orchard Park Development, approximately a third of the way beyond Mirassou Dr. and Mono St., thus my interest in this project. I will be attending the public Zoom meeting on 2/10/21 at 7:00 PM but have the following questions regarding the meeting. Have the City Council members agreed to attend this meeting? Has the RSUD been invited to attend and if so have they notified you of there intentions to attend? Will this Zoom meeting provide opportunity for live verbal and/or written communication and comments? And what do I need to do and/or have to be able to participate in this meeting?

With respect to your request for comments on the NOP

of an EIR for the proposed Hat Ranch Project, I have reviewed the NOP and have formulated my comments for your review. I have prepared my comments in the form of questions, concerns related to the existing surrounding community and in a more general sense as this proposed project relates to the cities ability to provide adequate support and services for completion of this project and for long term support after project completion. I have also provided my insights, as I perceive them, regarding the struggles the city is currently faced with and how those struggles may impact the project and the community.

I ask respectfully for your consideration of my comments and concerns for this project. It is my hopes that the EIR will be able to best provide the city and the community with an impartial assessment of the environment impacts of this proposed project. It is also my hope that my comments may help in identifying issues that may be mitigated to reduce or eliminate potential negative impacts

to the surrounding community and the city as a whole. The city will have a decision to make as to whether the city should seek annexation of the land for this development project and whether the proposed project plan should be approved and allowed to proceed with or without plan changes. Thank you in advance for your support in helping the city to make an informed decision.

My comments, questions and concerns are as follows:

Questions/Concerns for conducting the EIR:

- Why is the City of Manteca the lead agency for preparation of the project-level Environmental Impact Report (EIR) for the proposed Hat Ranch Project?
- What measures has the City of Manteca taken to ensure the EIR will provide a fair and impartial assessment of the environmental impacts of this proposed project (a project that purposes the

developing an 184.4 acre residential community of 739 dwellings)? This is specially of interest given the NOP indicates that Lead Agency personnel for the EIR are employed/selected by and take direction from the City of Manteca management.

Question/Comments regarding land annexation and agency interactions and impacts:

- This NOP indicates that the proposed Hat Ranch project would require detachment from the San Joaquin County Resource Conservation District. What role if any does the San Joaquin County Resource Conservation District play in reviewing the project proposal, providing feedback and/or approval on the proposal to San Joaquin County LAFCO (Local Agency Formation Commission) and to the city of Manteca?
- What are the key topics for consideration

that San Joaquin County will assess in making a decision to detach the Hat Ranch property from the San Joaquin County Resource District for the purpose of this proposed project?

- What are the key challenges or concerns for gaining approval for detaching the 184.4 acre site from San Joaquin County Resource District and for approval by San Joaquin County LAFCO for annexation of the land into Manteca?
- Does Ripon have any jurisdiction with respect to the development entitlements or public services? In a post by Mayor Cantu, he stated that Ripon does not have any such jurisdiction - yet the NOP under section titled Annexation and Rezoning states that detachment from both Lathrop-Manteca Fire District and Ripon Fire District would require approval by San Joaquin County LAFCO. Why would detachment be required if Ripon, at present, did not have some jurisdiction to development entitlements or services? Is

there a chance or has Ripon expressed concerns about this development project that my result in San Joaquin County LAFCO not approving this detachment?

Questions/Concerns related to proposed roadways, transportation and circulation:

- Mayor Cantu stated in a recent Facebook post that the proposed street system for this project is no different than that already existing on the adjacent neighborhoods. The NOP states in section titled Proposed Roadways and Infrastructure that a “future” Antone Raymus Expressway is proposed along the southern boundary of the project site and this road will connect with Pillsbury Road and Atherton Drive. It also states that Pillsbury Road is the “main entrance” into Hat Ranch site. The NOP again states in section Existing Land Uses that the proposed site would be bordered by the “future” Antone Raymus Expressway to the

south and the “future” Atherton Drive to the East. The first 2 plans for this project by the developer didn’t include any southern entrances into the project. The developer stated in a community meeting sponsored by Ripon Unified School District that the city would be responsible to build this roadway and they were not aware of any plans by the city to build a southern entrance into the project. The city also stated at the time that they had no foreseeable plan to build a roadway along the southern boundary of this project. Having Pillsbury Road as the main entrance and exit to the project with no other plans for the main entrance to be on the southern border of the project was a major point of contention to the affected surrounding community. Using the existing roadway would be a heavy and unreasonable burden. Pillsbury Road has only one narrow lane for either direction of traffic. It has landscape medians built all along the road making navigation of large

transport delivery vehicles and city emergency vehicles a challenge when cars are parked on the street. There are many cars parked on Pillsbury Road. Traffic during commute times makes for difficult exits from residential drive ways. Speeding on the roadway is already a major safety issue. Using Pillsbury Road as the main entrance and exit point to the project will result in major road maintenance issues. Establishing Pillsbury Road, due to the lack of any other major entrance and exit points into the development, is a major concern and is detrimental to the residents already living on Pillsbury Road.

- Given that Mayor Cantu already acknowledged that the road system will be no different than what already exists - then how confident can the surrounding community be the Antone Raymus Expressway will ever be built? The city has a long history of avoiding any building plans on this southern boundary. In 2017 the City Council discussed during a city

planning session that there were major engineering issues with building a roadway south of Hat Ranch that might serve any future development. It acknowledged that it had no foreseeable plans beyond 10 years to address this. The major issue cited by city engineering was related to city jurisdictional boundaries, levy's, storm drains and even potential railway issues. So the question is - what is the cities priorities in even getting this roadway built and if so when? There is no stated requirements for completion of this development project in the NOP. Nothing stated to hold the developer accountable to completion. Only a vague statement in the NOP under section Project Phasing indicates that the project would be constructed in phases over "several year" is offered. The NOP only states that upon buildout the proposed project and site would be bordered by the "future" Antone Raymus Expressway. Should Antone Raymus Expressway not be built at the start of the

project then residents on Pillsbury Road would be faced with a barrage of large construction vehicles and construction workers racing through their community from early morning to night. This will be a long standing issue for years - until such time that the Antone Raymus Expressway is built to alleviate this problem. This was true when the Atherton Development was underway. This problem was not lessened until other entrance and exit roadways were built making access to the project site more convenient. This heavy construction traffic also took its toll on the street maintenance on Pillsbury.

- It is no secret that the city already has problems maintaining its existing roadways. There are so many roadways that are in desperate need of repair yet those plans have repeatedly been put aside. Why doesn't the City press the developer to pay for building this roadway. Has the city not been firm in pressing the developer to pay for building the Antone

Raymus Expressway because they don't want to discourage the builder from moving forward with their building plans? The Mayor has clearly made known, at City Council meetings and in his Facebook post, his agenda and desire for the city to build what he terms as affordable housing. The community knows that affordable housing is merely just code for (low cost/cheap and high density development). I have witnessed and read Mayor Cantu's aggressive communication style to pressures the City Council, planning department and the citizens to accept building these types of projects. He is not shy about using what I view as strong arms tactics to push the city into moving forward with his own personal agenda and political ideologies. The existing community surrounding Hat Ranch should not have to suffer because of Mayor Cantu fist pounding approach to serving his agenda. The Hat Ranch proposed development plan as it stands is nothing

more than ill conceived high density low cost housing project. It is destined to create a traffic nightmare for the community. The city should run away from this project or demand better from the developer.

Questions/Concerns regarding plans for including an Elementary school within the development:

- As stated previously, RUSD sponsored a meeting with the surrounding community where the developer and RSUD provided some conceptual plans for an elementary school. These plans called for the school to be located on the East corner of Pillsbury Road and Mono. This drew much opposition as it was clear the location was far from ideal in that it would be untenable with respect to traffic, noise and pedestrian issues and burdens it would place on existing home owners living on Pillsbury Road and Mono. At this meeting

questions were posed to the developer regarding what contractual agreements would be made to ensure their contribution to build the school would be met. They were asked how much financially they would be responsible to contribute to build this schools. Neither RSUD or the developer's (Richland Properties) representative could stipulate their contractual obligation for building the school. RSUD mention that school bonds could be the answer. We all know that means even more property tax obligations for those located in the RSUD. The last attempt by RSUD to get a bond approved failed badly on the ballot. The developer indicated that there was no contractual consideration for making their contribution to pay partially for building the school. All the developer could say was that they prepared the plans and the community can trust that they will contribute to this noble cause. If the developer is not prepared to make a contractual commitment to

contribute to building this school then they might as well try and sell the community swamp land in Florida. So I ask again what was asked at that meeting.

- What contractual agreements have been or will be made prior to approving this development project that will obligate the developer to contribute to building this elementary school?
- How much, if any, is the city expecting to hold the developer accountable for? What agreements and expectations have been made as to when this school will be built.
- Where will the entrances and exits be placed on the school grounds for the school parking lots?
- Who will have the oversight authority for the layout and development plans for this school - RSUD or the developer?

These are all questions that the community should expect to be answered prior to the city approving this development plan. The

NOP provides no insights to any of these questions. How is the surrounding community expected to assess the potential impact on their lives that this schools will bring.

Questions/Concerns for public utilities:

- What proposed plans have been considered and made to provide adequate technological communication services (phone, internet and TV) that won't disrupt or degrade current services provide to the surrounding area? The NOP fails to address this integral need in our daily lives.
- What assessments has the city done to ensure an adequate flow of water to all portions of the project for both domestic and fire protection (as stated in the NOP titled Proposed Public Utilities)? At present the cities drinking water doesn't meet the current low threshold requirements by the State. The city has indicated in public notices that the city has some wells that

that meet this standard during low usage seasons. But that during summer months the city may have to provide drinking water from wells that do not meet State standards. How can the city give such assurances to provide adequate water while supporting unfettered growth - specially when it can't even manage to do this for its existing residents?

- The city currently has flood control issues and aging levy's that were built as far back as 1930. These levy's are in urgent need of repair that have been slow to progress. Our city has more than once in the last 4 rainy seasons narrowly escaped disaster due to levy breaches of these aging systems. The city continues to push growth beyond it's current city boundary's - such as with this proposed development project. Should the city first put its resources toward addressing these basic infrastructure needs. Infrastructure that is necessary for the safety of its inhabitants and their properties.

Questions/Concerns related to the cities current financial problems:

- Our city hasn't managed to even have an adequate financial accounting for more than 10 years. At present the city can't even say when they will have our financial books in order. How can the city adequately assess the financial burden that a development project of this large scale will be placed on the city services?

Questions/Concerns related to Zoning

- The EOP states (under section titled Project Components) that "a unique district 112 half-plex units" have been proposed. Please note the term "unique". The reason for the use of the term "unique" seems evident when reviewing section Planned Development/Development Agreement of the EOP. It is here that acknowledges

deviations from base zoning have been proposed to accommodate building of these “unique half-plex units”. It is also where it explicitly states that if a Planned Development does not provide a listing of allowed uses, the regulation of Base Zoning District, R1, shall prevail. The EOP also notes here that the proposed Planned Development standards for the proposed project build upon the City of Manteca’s Standards for R-1 Standard and Small Lot Single Family Development, as defined in Section 17.26.040 of the Municipal Code. I read this as an acknowledgment of the specific Municipal Code that the proposed plan doesn’t meet and thus the reason for having to propose deviations from Municipal Code. It further goes on to note some examples of the proposed deviations and why. It explicitly states that these are offered as “examples”. Without listing all the proposed deviations in the EOP how is the City Council or the affected community to know how they

may be impacted by these proposed deviations.

The examples offered are as follows:

- setbacks for proposed half-plex units would be reduced to suggest that front setbacks would be minimum of 15 feet,
- side setbacks would range between zero feet and five feet, and
- rear setbacks would range between five feet and 10 feet.

So here we have an acknowledgment that a much higher density and very small sized lots in comparison to existing surrounding developments are planned for this project.

- Another concern noted is that under the EOP section Annexation and Rezoning that the project calls for changing the zoning from AG-40 to Planned Development Low Density Residential (PD-R1). It is here that the proposed plan indicates the residential homes will be low density homes. Yet under the section Planned Development/Development Agreement it

states the proposed Planned Development standards are defined as R-1.

- Is there a difference between “PD-R1” and “R-1”?
- Why the inconsistency between the zoning use designations between these 2 sections?
- Is this an acknowledgment that the proposed land use for this project has changed from what was prepared for Annexation and Rezoning to what is currently being proposed by the developer?
- It’s obvious that high density “unique half-plex” unit have been added but what of the other 627 traditional single family detached homes planned for this project - what are the present land zoning use codes for the 627 homes? This is unclear.
- What are the definitions for these land use designations as they relate to lot sizes and home square footage?

This information should be more clearly conveyed so we can provide informed feedback on how this development will impact the surrounding community.

In Summary:

The first and original plans submitted by the developer were rejected by the city council because the lot sizes were far too small and it included numerous duplex type units. The Council was smart and savvy in recognizing that those development plans were not only not conforming with the surrounding development but that it would bring far too high of density population into a pocket that required funneling the vast numbers of new residents through the existing housing developments. They recognized that the existing streets were not designed to handle the extreme amount of traffic the development would bring. They recognized the noise, traffic pollution, pedestrian and vehicles safety issues, cultural and aesthetics

issues associated with the proposed development. They recognized that attempting to pocket a development of much lower cost homes in the middle of an existing higher priced development would drastically and negatively impact the property values of the existing homes - in this they were not naive. You would think that the Council has learned that building high density cheap housing will only result in large numbers of rental properties. You would think that that the Council understands that many of these residential units will become rentals - that they won't be afforded the love and care in the same manner as home where the property owner actually reside. You would hope that the Council acknowledges that the number of vehicles per home far out weights what the development can handle. You would hope that the Council acknowledges that this type of development is destined for numerous rentals and with it comes the issues of combating trash and graffiti. You would hope that this City Council will recognize and

acknowledge all of this and the inevitably issues that this development will impose on our community. You would hope that City Council will just say NO to approving annexation of this land into the city for the purpose of moving forward with this version of the developers low cost housing project.

This development without a doubt is deliberately designed to provide much cheaper, higher density housing compared to those already built in the surrounding neighborhood. It is clear that the developer has no concern for the surrounding community. The developer without a doubt is hoping that members of City Council are naive and will approve this low cost housing development under the ploy that it's what our city needs. In reality they are hoping to take advantage of some of our Mayor's personal biases and political ideologies and aspirations. This developer is not looking out for our best interest. Its interest reside only in its own self interest - its desire to maximize the amount of

cash they can squeeze out of the project. And all this at the detriment of the large number of already existing home owners that live in the surrounding area. It is clear that this development will end badly and cost our whole city dearly once the developer is long gone. I implore our City Council to push the developer to put forward development plans that are far more responsible and neighborly to our community.

Regards,
Cindy Weese
925.640.8575

◦ [Sent from AT&T Yahoo Mail for iPhone](#)

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----- Forwarded message -----

From: **David Rashe**; <david.rashe@icloud.com>

Date: Thu, Feb 18, 2021 at 1:30 PM

Subject: NOP (EIR) for the Proposed Hat Ranch Project. Scoping

To: <john@jbandersonplanning.com>

Cc: <MantecaPlanning@ci.manteca.ca.us>

Mr. Anderson,

As a follow up to the February 10, 2021 public scoping meeting for the EIR, please accept the following comments and enter them into the record for the proposed Hat Ranch project.

For the elements of the EIR we would like to see the following:

Traffic: Traffic is one of the greatest concerns for this project. As you heard from the meeting attendees, the surrounding neighborhoods are not designed to accept the massive amount of additional traffic this project would generate. Since the meeting was for scoping purposes only, we could not get detailed enough to fully express traffic concerns. It was stated in the meeting that Pillsbury has been designated as the main thoroughfare to get traffic from the subdivision to Woodward. Pillsbury is in no way designed to accept such a large volume of traffic even off peak hours. As it is right now, people living on Pillsbury must park their vehicles on the sidewalk as the drive lanes are narrow due to the medians.

The current western and eastern subdivision designs force too many vehicles onto Polk and the surrounding connections on the western subdivision and Veramonte and Pillsbury on the eastern subdivision. These streets are not designed for a higher volume of traffic and definitely not at the speeds people will be traveling. Included in the traffic study should be a **speed analysis**.

It would be expected that the traffic analysis include the following:
Evaluate the impact of the rail lines for both ingress and egress from not only the new neighborhoods but cumulatively with the existing neighborhood traffic volumes. The existing and proposed train schedules need to be included since it has been publicized that the train traffic is going to be increased significantly.

Evaluate the need for traffic signals especially at Pillsbury and Woodward as well as Atherton and Woodward as the current stop signs will not be enough for the increased volumes.

The addition of bicycle lanes on Pillsbury as well as all other streets in and around the proposed subdivisions.

Pedestrian and bicycle circulation

Please note: The Manteca Traffic Calming Program (MTCP) and Bicycle Route Master Plan (BRMP) do not seem to have been incorporated into the proposed design. The traffic impact report should also address these programs and how they mesh with vehicular traffic.

Open Space: Open space is very important for the livability of every neighborhood. The current design has done an extremely poor job at providing open space conducive to neighborhood living. The open space element should include design that shows the park and school property on the eastern parcel separated from one another. It is suggested that greenbelts with stormwater runoff retention, meandering walking paths, landscaping, and Concrete Masonry (CMU) walls; similar or in-kind to those found on Atherton Way, be incorporated

behind the homes located on Mono Street and connecting with the greenbelt that already exists on Mono from Veramonte to Pillsbury. Additional, greenbelts should be incorporated throughout the western and eastern subdivisions

Threatened or Endangered Species: It is understood that this agricultural land so we have no comment.

Air and Water Quality: As was discussed in the public scoping meeting, water is of great concern in Manteca. Not only should the impact of water consumption be analyzed but the ability of the City of Manteca to supply and maintain water quality in 100% compliance with state and federal standards must be analyzed. This analysis should include a look back on the history of water quality as well as a look forward. Let it be known that the City of Manteca is often out of compliance with water quality standards under current conditions and housing stock.

Historic and Cultural Sites: The project includes the demolition of a structure with local significance whether on a local historical index or not. It cannot be discounted just because of an absence of being placed on a local index.

Social and Economic Impacts: Include

Impacts on Available Housing Stock; Include

Impacts to Business; Include

Property Values; The City of Manteca has a responsibility to protect the property values of existing properties equally with balancing new projects and their property values. This project with the higher density than the surrounding neighborhoods does not do that. A full analysis of real estate values should be completed.

Aesthetics and Noise: Include construction noise, dust control, street cleaning etc.

Cost and Schedule Analysis: An analysis of the overall cost to the City should be performed. It was mentioned by the City official in attendance that the CIP program is picking up the tab for improvements to the sewer and storm water system in and around this proposed development. It is not the responsibility nor moral for the City to use CIP money to enhance the viability of a development to the detriment of the tax payers city wide. The approach taken should be that the developer pays its own way; 100%, and then some depending on the outcomes of the EIR.

Environmental Mitigation Plan: Include

Additional Documentation

Solar Easement: The project has not defined which lots will be three-story (two-

story with a tuck under garage is three-story), two-story, or one-story. Many of the existing homes adjacent to both subdivisions have or will be getting solar PV as well as

solar water heating on their homes. The project must be analyzed for shading etc. as per the California Solar Rights Act comprising of the following California sections of law: California Civil Code Sections 714 and 714.1, California Civil

Code Section 801, California Civil Code Section 801.5, California Government Code Section 65850.5, California Health and Safety Code 17959.1, California Government Code 66475.3 and California Government Code Section 66473.1.

Further known as, California's Solar Access Laws; Solar Right Act amended in 2004 by AB 2473, Solar Rights Act amended in 2003 by AB 1407, Solar Shade Control Act of 1979 (Public Resources Code section 25980-25986), Solar

Rights Act of 1978, Solar Easement Law, and any local Solar Access laws and guidelines.

Respectably,

Jackie and David Rashé

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February 2, 2021

John B. Anderson, Contract Planner
Community Development Department
City of Manteca
1001 West Center Street
Manteca, CA 95337
209.599.8377
john@jbandersonplanning.com

Re: Proposed Hat Ranch Project

To: John B. Anderson

I would like to give the following input on the proposed Hat Ranch Project:

- I support the neighborhood parks and elementary/middle school
- I support traditional single- family detached homes
- I reject the idea of half-plex units mixed into a low-density housing area. These will have a negative impact on street parking, potential for the property to be purchased by investors for rentals, and increased problems with street parking availability. These are also presently planned on very small lots.
- The plan should reflect that the Hat Mansion be demolished as it does not fit with the plan for a low-density neighborhood, and not leave it open to other possibilities.
- I reject the proposed lot size as they are small which leads to two story structures which will be sold to larger families, and often multi-generational families, which require additional street parking of vehicles due to the number of residents in the home.
- The Eastern Parcel which borders my home should have larger lots on the northern edge, and single-story homes as the homes (including mine) are almost all single-story homes on larger lots. If you allow the small lot size, then a great alternative for us would be a buffer zone between the two housing projects. This could be a green space with bike or walking trails, etc.

Respectfully,

A handwritten signature in cursive script, reading "Michelle Smith". The signature is written in dark ink and is positioned below the word "Respectfully,".

Doug & Michelle Smith
1490 Freestone Rd.
Manteca, CA 95337
541.778.2015

From: Eric Darville <darville_e@yahoo.com>

Sent: Tuesday, February 23, 2021 12:10 PM

To: john@jbandersonplanning.com

Subject: hat mansion plan

To whom it may concern,

We have been dealing with the developing trying to push through plans for 3 years, and for 3 years they have not listened. I live in the solera subdivision (athertons newest) and paid a huge amount for my home as well as a huge amount of property taxes as well as a solera's subdivision maintenance fee. The reason that my neighbors and I pay this and live in Manteca versus the surrounding cities is we want a safe enjoyable place to raise our families and kids. We had no problem with the initial plan of a retirement del webb style community where hat mansion is, why you ask because seniors in those community's are required to maintain their yards, they are quiet, pay their taxes and don't create a lot of traffic. Then they decided there would be more money in small lots and small houses next to one of the pricest areas of Manteca. Seriously? There goes our property values, up goes traffic which is a nightmare on woodward and especially Austin. This is not the right place to jam in as much housing as you can, put it somewhere else! We asked to put a gate to keep people out of our subdivision the city told us no because of traffic, but you can put hundreds of new houses next to us and that does not create traffic? If they put less houses with bigger lots and bigger foot prints our values would not tank, there would be less traffic and the area would stay nicer, don't put tiny high density, low footage houses next to us. Look at what happened in stockton where they did that those neighborhoods are now overrun with traffic, crime, and their values are a joke. If they don't listen at the next meeting we will pack the city council with all our subdivisions residents.

Sincerely,
Eric Darville

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From: eva chong-castro <echongcastro@gmail.com>
Sent: Monday, January 25, 2021 3:51 PM
To: john@jbandersonplanning.com
Subject: Hat project - For Public meeting February 10, 2021

Hello John,

I personally do not want the mansion to be torn down. It should be a historical site where people can come and visit maybe make it where it can be rented out for different venues.

But my concern of more smaller homes that may be built is yes property values are brought down when there is smaller cheaper homes built within the vicinity of larger more expensive homes. Don't know about you but I like having a lot of equity In case I ever want to sell or refinance.

Another down side to smaller cheaper homes is they are bought and sold more frequently and then end up as rental properties operated by some type of property management company that doesn't care about the neighborhood as long they get a rent payment on time. That type of management and renter mentality will be doubled with duplexes. Duplexes will be placed less than two blocks from our houses meaning we really take a big hit on our property value and are now the closest homes next to potential bad renters bringing unwanted nuisance to our quite neighborhood.

Thank you for your time.

Eva Chong-Castro.

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From: greg miculinich <gmiculinich@gmail.com>

Sent: Thursday, February 18, 2021 12:03 PM

To: john@jbandersonplanning.com

Subject: Hat Ranch Project

Greg Miculinich
684 Sawtooth Ct
Manteca CA, 95337
(209)470-2079

Hello,

My name is Greg Miculinich, I am writing today in response for the proposed Hat Mansion project. I live at 684 Sawtooth Court, my property backs up directly to the project site and I have a few concerns with the proposed project.

My first and main concern is with the inclusion of 112 duplex units and what seems like comparatively smaller lot sizes to current bordering neighborhoods. I am concerned with smaller houses, lots, and duplexes coming in at lower appraised values bringing neighboring home values down. If the city of Manteca sees the need to build smaller houses and a large group of duplexes it should be done away from some of the more larger houses and lot sizes the already exist within the city.

A second concern with the annexation of the site and if it is built with the tentative subdivision map of 739 dwellings is the increase of overcrowding with extremely limited services on the south side of hwy 120. There is already massive bottleneck issues driving Main street, Union ave, and Airport way to get over 120 and Van Ryn ave and Industrial Park drive traffic jam regularly essentially cutting off all residences south of 120 to simple services like grocery shopping which is exclusively offered on the north side of hwy 120. The 1,301 home Griffin Park project and other current construction south of 120 will further exacerbate this problem before the Hat Mansion project will have even broke ground.

Please take into consideration these issue before annexation and approval of this project. The overcrowding and lack of services south of 120 is a real issue for residences and does not need added to with a high-density housing project like the proposed Hat Mansion Project. Please consider possibilities of leaving the property how it is, so as to not add to the over crowding issues plaguing the south end of the city, or greatly reducing the number of residents by having Richland developers scrap the idea of duplexes and small lots in place of larger lot sizes and homes that conform with already established surrounding neighborhoods like they said would 3 years ago when the city council turned them away and told Richland developers to come back with plans that matched existing housing.

Thank You,

Greg Miculinich

From: Jodi Beaty jodi_beaty@yahoo.com>
Sent: Wednesday, February 10, 2021 5:02 PM
To: john@jbandersonplanning.com
Subject: Hat Mansion Plans

Hello John,

I am writing to voice my concerns over the proposed plan for the Hat Mansion property. The homes you are proposing to build will cause major problems for the current infrastructure of the neighborhood. The plan is to turn Pillsbury into a through street. Pillsbury is already dangerous for children and families in the neighborhood because people regularly speed down that street. The increase of cars using this street to get to that neighborhood would increase risk making it unsafe for families, which are what live in this neighborhood. The Austin Road on and off ramps will be closing soon making Main Street the only close entrance to the freeway. Main street is one lane in each direction and already beyond congested. These added house would increase the traffic there making it difficult for people to get into and out of the south side of the 120. There are no grocery stores on the south side of the 120, which means that these homes will be increasing the problem of crowded shopping centers. Crowded shopping centers can create very unsafe environments for families and children. In addition to these complaints, the smaller homes will decrease the value of the homes in the neighborhood. I have worked hard my whole life to save my money and buy my dream home. Your proposal is putting families into unnecessary financial insecurity. I understand affordable homes, but your proposal is not acceptable.

Thank you for your time,
Jodi Beaty

[Sent from Yahoo Mail on Android](#)

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From: Jodi Beaty jodi_beaty@yahoo.com>
Sent: Wednesday, February 10, 2021 5:05 PM
To: john@jbandersonplanning.com
Subject: Hat Mansion Project

Hello John,

I had an additional concern. Another road that would be turned into a through street for this neighborhood is Buena Vista. Buena Vista currently is a street many children (specifically students) have to cross multiple times a day to and from school. Turning this stree into one that connects to this new neighborhood would increase the traffic making it very unsafe for the children. I have personally seen several kids almost get hit on that street. This is not an acceptable option.

Thank you,
Jodi Beaty

[Sent from Yahoo Mail on Android](#)

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From: Maura <carrma5@yahoo.com>

Sent: Sunday, February 21, 2021 4:46 PM

To: JOHN@JBANDERSONPLANNING.COM

Subject: Zoom Meeting: Hat Ranch Project-Response

Hello Mr. Anderson,

This email is in response to the Zoom Scoping Meeting February 10, 2021. Our home is directly aligned with this property and we are extremely concerned with the current project in mind.

As retired elders we deliberately waited to purchase a home in this very specific area due to its quality, location and peacefulness. Moving from busy Bay Area (Fremont), we intentionally purchased a higher quality home and lot size that Atherton provided. The following bullet points are just a few vital ways in which the current projected Hat Plan will directly negatively impact our lives, our privacy, our home, our peaceful community, and our overall livelihoods.

- **Privacy:** The current project has smaller lot sizes that will force our backyard to be shared with two other homes. Our home is 2-stories with many windows to the bedrooms and bathrooms, enabling neighbors to invade our privacy. Pedestrians run and ride through our sidewalks and streets as they do not have a clear path to go through when they are enjoying the outdoors.
- **Safety:** Our community is very close and family oriented. There is a balance of retired and young families with children and animals. This specific location of our home is secluded from most traffic, enabling our grandchildren and children to safely play outdoors. More homes will bring in more traffic, crime, noise from the outer residents/non-residents. Manteca needs to build a solid relationship with its Police Department as they currently struggle to support its citizens now.
- **Noise Disturbance:** This area is very peaceful. We enjoy the birds singing along our fence and how calm the air is. The plan will demolish the quiet and bring increased noise from homes, traffic, construction, of Fire Station #5, the school and the increased traffic during school hours. This will be an enormous interference with our sensitivity to noise.

- **Quality of Life:** One thing the pandemic should have taught us is to appreciate the simplicity of life. This huge project will increase dust and dirt into our home, impacting our air quality and air filtration system. Jose has COPD and this will prevent him from simply being able to garden in the backyard. More homes, more people, more traffic-which equals more emissions, worsening the air quality forever. The animals that currently live in the land will have nowhere to go but into our properties, increasing the need for us to protect our vegetation and landscape. The current plan robs us of the direct sunlight that we appreciate in the mornings and will obstruct our views of the beautiful sunsets in the evenings. This robs us of our simple pleasures of living in this very specific area.

Ideally, we would greatly support a plan that involves a large park with walking/biking paths for pedestrians as this will eliminate the current ones from riding on our sidewalks and streets, as well as be a wonderful green resource for the entire community to utilize. There should be some separation from this community to any other project that involves more homes and increased traffic. Our roads are not currently built to withhold the increase of vehicle traffic while keeping pedestrian safety in mind. We are not opposed to homes, but we suggest that roads and homes equal or greater in size and quality be built as to not reduce the value of our Atherton home as well minimizing the impact of traffic on our community.

Manteca has all the opportunities to set an example of how a City can take lead in caring for its citizens and listening to the needs of the community by making green decisions not solely based on numbers for profit. We hope our input it taken into consideration and are readily available for any follow-up communication.

Your Manteca Residents,

Jose and Maria Carreiro
attachment: letter

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From: Ken Harvey <ken.harvey@servicenow.com>

Sent: Thursday, February 11, 2021 9:29 AM

To: John Anderson <john@jbandersonplanning.com>

Subject: RE: Link to public hearing for Hat Ranch Project

Hi John,

Thankyou for the meeting last night and handing the public comments. I thought you conducted it well and were very thorough.

Even though I heard my shared concerns stated by other speakers, I still wanted to follow up with you in writing before the 23rd.

Again as I stated in my previous message I live in Solera Neighborhood on Mono St (Mr/Mrs Rashe and I are friendly neighbors).

In fact, we have good communications all down the street on Freestone, Veramonte, Pillsbury etc. It is good to have a network!

The Hat Ranch and Mansion in my mind were never going to last long since our moving in 3 years ago. We moved to Manteca for the same reasons this city is expanding as rapidly as it is. Affordable alternative to the BayArea, safe quiet neighborhoods, and a family oriented culture. These are core traits to the neighborhoods we live in now, and expect that to be driving decisions made by our elected officials. However, city planning appears to be getting ahead of itself in terms of growth and building sustainable infrastructure that is planned out with a long term well-being in mind. It is for this trend that concerns me, and the basis for my comments here. I will list them below and I'd appreciate that my letter will be included in the EIR to Mayor Cantu, and Council!

Impact to surrounding Neighborhood(s). This is my top concern. The roads leading in and out of this huge project are through a narrow and winding residential area. Pillsbury, Polk, and Mono would become mini expressways to get out of the neighborhood and onto Woodward or Manteca Road. My kids and I walk and ride bikes through these sidewalks every day, and can tell you its already impacted by traffic from existing homes much less adding thousands more. Any new developments to our south should have its own ingress and egress, rather than pouring into our neighborhoods. The impact study needs to take this into account!

Local infrastructure is next on my list. As shared by the others on the call, getting to the Freeway along Woodward and Moffat is challenging as it is. I hit the road around 2:30p to pick-up my kids from school in Ripon, and it takes 15+ mins to travel about ½ mile to the Austin on-ramp. Along the way the road is torn up with potholes and uneven surface. There are dozens of 'Semi' Trucks parked along Moffat (the drivers live in our neighborhood) which makes turning hazardous. The Train crossing has seen an increase in the freight traffic as well that blocks the intersection making the 3 way stop even more dangerous. Basically, it's a country road that was never designed to handle the amount of traffic going through it. That intersection (as well as others) need to be updated before our City considers annexing MORE land and building more homes! The impact study should explain to the planning dept. that the rapid growth of residential areas without thinking through quality of roadways, water, services,

and keeping this a place we want to raise our families are reaching their breaking points and will certainly be a topic in public arena for a long time to come (and in the next elections). As you can tell from the call last night people are getting very upset.

The layout of the project itself, and proposed school are the last thing I want to hit on. The layout is - in a word - terrible. The compact design of the streets look like a prison yard from above, and nothing like the surrounding area. The 'raceway design' seems like it would encourage speeding, and the school is built in the interior making the daily traffic (drop-offs and pickups) running through the core of the community to likely be a nightmare. I love the idea of a school by the way, but whoever drew these plans up either doesn't have kids or never lived near a school. What was their key intention with this layout? Seems its how to pack as many homes into that area as possible and not quality or safety. The safety of the kids, walking through this neighborhood, and overall curb appeal all seems very low priority to the design. I think your impact study needs to consider these design flaws carefully. Ultimately, anything built back there needs to be desirable, otherwise our property values tank.

One last thing is I'd like to request that these homes which back up to ours along Mono are single story. We bought into this community with an aesthetic that would be impacted by having a second story window looking down onto our property and blocking the sunlight. May seem like a trivial issue to the other items, but it is of a high importance to me and my neighbors.

OK, that's about it. I think I've laid out everything as well as I can. I look forward to hearing about the next step in evaluating this proposal and what changes / amendments / considerations are made as a result of the public input on the local impacts.

Regards,
Ken Harvey

From: John Anderson <john@jbandersonplanning.com>

Sent: Tuesday, January 26, 2021 8:56 AM

To: Ken Harvey <ken.harvey@servicenow.com>

Subject: RE: Link to public hearing for Hat Ranch Project

[External Email]

Ken:

We have received your request. Thanks for your interest.

JBA

John B. Anderson, President | **J. B. Anderson Land Use Planning**
139 S. Stockton Avenue, Ripon, California 95366 | 209/599-8377



From: Ken Harvey <ken.harvey@servicenow.com>

Sent: Monday, January 25, 2021 10:02 AM

To: john@jbandersonplanning.com

Subject: Link to public hearing for Hat Ranch Project

Hi John,

I wish to get a Zoom link to the meeting planned 2/10, 7pm.

The City sent me a letter that I should contact you for this.

Thanks!

Ken Harvey (Solera Neighborhood)

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From: Linda Jo Bruton <lindajobruton@yahoo.com>

Sent: Wednesday, January 27, 2021 12:00 AM

To: john@jbandersonplanning.com

Subject: Hat mansion

Has anyone considered making it a residence for the homeless?

The city would have to retrofit the house but, it would eliminate all the tent cities we're being invaded with.

To stay in the homeless 'mansion' one would have to submit to drug testing 3x a week.

There can be counseling and workshops.

Kitchen for 3 meals a day.

Options to learn trades.

It could be one of the best homeless shelters in the nation.

It is far enough from other homes to not cause homeowners anxiety.

We could clean up the now existing tent cities.

We get all the surrounding cities' homeless already; might as well make them as healthy as we can and see if a few want to get back on their feet.

I've been homeless and I learned that there are three types of homeless.

1) Mental illness

They need help and meds.

2) Unfortunate circumstance

(Me) This is temporary and they'll get back on their feet.

3) Chosen lifestyle.

They want to live unhindered.

Manteca can help every homeless person in every category.

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From: Renee Reed <reneem.reed@sbcglobal.net>

Sent: Tuesday, February 23, 2021 3:52 AM

To: john@jbandersonplanning.com

Subject: Hat Ranch

Dear Sir,

I have been a resident of Manteca since 2014, when it was nice and peaceful. I moved here from Texas after we retired thinking it would remain nice and quite, wrong. With the speeders and donut makers, it was nice and peaceful for only a few years. When we selected our new home that was one of the main attractions we love seeing. The residents of Orchard Park would like the mansion to remain as is. Maybe consider turning it into a museum but not destroy it and turn into more homes and or schools. We already are suffering with congestion coming and going throughout the community and the freeways. Contractors love to build but they don't have a clue of what the residents endure. We have a problem with speeders up and down our streets with no consequences. We rarely see a police officer, seems everything is on auto pilot and that's not a good look. So we are pleading that you take your project somewhere else.

Sincerely

Renee Reed

Sent from [Mail](#) for Windows 10

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-----Original Message-----

From: Tim Barker <t3barker@icloud.com>
Sent: Wednesday, February 10, 2021 7:38 PM
To: John Anderson <john@jbandersonplanning.com>
Subject: Re: Hat Ranch

We would like to know what they are going to do about water treatment. I have lived in Manteca my whole life and I know that the water treatment plants we have in town will not facilitate that many more homes, people, parks, and/or business.

Sent from my iPhone

On Feb 10, 2021, at 6:14 PM, John Anderson
<john@jbandersonplanning.com>

wrote:

Tim I will add you to the zoom link list. Please see below.

Good Evening,

Thank you for your interest in attending the City of Manteca Hat Ranch
EIR Scoping Meeting to be held on February 10, 2021 at 7:00pm.

Please use the below Zoom link and information to join the meeting.

Should you have any questions about this link or Zoom details, please
feel free to reply to this email.

Join Zoom Meeting

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John B. Anderson, President I J. B. Anderson Land Use Planning
139 S. Stockton Avenue, Ripon, California 95366 I 209/599-8377

-----Original Message-----

From: Tim Barker <t3barker@icloud.com>

Sent: Wednesday, February 10, 2021 6:10 PM

To: john@jbandersonplanning.com

Subject: Hat Ranch

RSVPing

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