144-490 Quintal Road Project

Tiered Initial Study Mitigated Negative Declaration

August 21, 2024

Prepared for:

City of Manteca
Development Services Department
Planning Division
1215 W. Center Street
Manteca, California 95337

Prepared by:

Stantec Consulting Services Inc
2999 Oak Road, Suite 800
Walnut Creek, California 94597

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ACRONYMS AND ABBREVIATIONS

AB	Assembly Bill
ACE	Altamont Commuter Express
ADA	Americans with Disabilities Act
ADWF	average dry weather flow
AFY	acre-feet per year
APN	Assessor's Parcel Number
Applicant	Quarterra Multifamily
AQP	Air Quality Plan
ARB	Air Resources Board
Basin Plan	Water Quality Control Plan for the Sacramento-San Joaquin River Basins
BAU	business as usual
bgs	below ground surface
BMP	best management practice
BRA	Biological Resources Assessment
Cal EPA	California Environmental Protection Agency
CAL FIRE	California Department of Forestry and Fire Protection
CalEEMod	California Emissions Estimator Model
CalGreen	California Green Building Standards Code
Caltrans	California Department of Transportation
CAP	Climate Action Plan
CARB	California Air Resources Board
CBC	California Building Code
CCAP	Climate Change Action Plan
CCR	California Code of Regulations
CDC	Centers for Disease Control and Prevention
CEC	California Energy Commission
CEQA	California Environmental Quality Act
CFR	Code of Federal Regulations
CH_4	methane
City	City of Manteca
CMU	Mixed Use Commercial/Commercial Mixed Use
CNEL	Community Noise Equivalent Level
CO	carbon monoxide
County	San Joaquin County
CO_2	carbon dioxide
dB	decibel
dB(A)	A-weighted decibel
DOC	California Department of Conservation
DOF	Department of Finance
DPM	diesel particulate matter
DSD	Division of Safety of Dams
DTSC	Department of Toxic Substances Control
du/acre	dwelling units per acre

EIR	Environmental Impact Report
EOP	Emergency Operations Plan
EV	electric vehicle
EVA	emergency vehicle access
FEMA	Federal Emergency Management Agency
FMMP	Farmland Mapping and Monitoring Program
FTA	Federal Transit Administration
GAMAQI	Guide for Assessing and Mitigation Air Quality Impacts
GHG	greenhouse gas
gpd	gallons per day
GWP	global warming potential
GWh	gigawatt-hours
HDR	High Density Residential
HFC	hydrofluorocarbons
HRA	Health Risk Assessment
HSC	Health and Safety Code
Hz	Hertz
in/sec	inches per second
ISMND	Initial Study Mitigated Negative Declaration
LCFS	Low Carbon Fuel Standard
L_{dn}	day-night sound level
LDR	Low Density Residential
LE	Land Evaluation
LESA	Land Evaluation and Site Assessment
L_{eq}	equivalent noise level
LOS	level of service
L_{max}	maximum sound level
L_{min}	minimum sound level
LTA	Local Transportation Analysis
L_{xx}	percentile-exceeding sound level
MAX	Modesto Area Express
MDR	Medium Density Residential
MEIR	maximum exposed individual receptor
MERV	minimum efficiency reporting value
MFD	Manteca Fire Department
mgd	million gallons per day
MMT	million metric tons
$MMTCO_2e$	million metric tons of CO_2 equivalent
MPD	Manteca Police Department
MRZ	Mineral Resources Zone
$MTCO_2e$	metric tons of CO_2 equivalent
MUSD	Manteca Unified School District
MWh	megawatt-hour
NAAQS	National Ambient Air Quality Standards
NAHC	Native American Heritage Commission

NO	nitric oxide
NOA	naturally occurring asbestos
NO_x	nitrogen oxide
NO_2	nitrogen dioxide
NPDES	National Pollutant Discharge Elimination System
NRCS	Natural Resources Conservation Service
N_2O	nitrous oxide
OPR	Governor's Office of Planning and Research
O_3	ozone
Pb	lead
PFC	perfluorocarbons
PG&E	Pacific Gas and Electric
$PM_{2.5}$	particulate matter 2.5 microns or less in diameter
PM_{10}	particulate matter ten microns or less in diameter
ppb	parts per billion
ppm	parts per million
PPV	peak particle velocity
PRC	Public Resources Code
Project	144-490 Quintal Road Project
RCNM	Roadway Construction Noise Model
RHNA	Regional Housing Needs Allocation
ROC	reactive organic compounds
ROG	Reactive Organic Gas
RTD	San Joaquin Regional Transit District
RTP/SCS	Regional Transportation Plan/Sustainable Communities Strategy
RWQCB	Regional Water Quality Control Board
R-1	One-Family Dwelling
R-3	Multiple-Family Dwelling
SA	Site Assessment
SB	Senate Bill
SCAQMD	South Coast Air Quality Management District
SCWSP	South County Water Supply Project
SF_6	Sulfur Hexafluoride
SGMA	Sustainable Groundwater Management Act
SIP	State Implementation Plan
SJCOG	San Joaquin Council of Governments
SJMSCP	San Joaquin County Multi-Species Habitat Conservation and Open Space Plan
SJVAB	San Joaquin Valley Air Basin
SJVAPCD	San Joaquin Valley Air Pollution Control District
SLCP	Short-Lived Climate Pollutant
SO_2	sulfur dioxide
SO_4	sulfates
SRA	State Responsibility Area
SSJID	South San Joaquin Irrigation District
Stantec	Stantec Consulting Services Inc.

STC	sound transmission class
SWPPP	Stormwater Pollution Prevention Plan
TAC	toxic air contaminants
TDM	Transportation Demand Management
TFM	Travel Forecasting Model
TIA	Traffic Impact Analysis
USEPA	United States Environmental Protection Agency
USFS	United States Forest Service
USGS	United States Geological Survey
UWMP	Urban Water Management Plan
VHFHSZ	Very High Fire Hazard Severity Zone
VMT	vehicle miles traveled
VOC	volatile organic compounds
WMP	Water Master Plan
WQCF	Water Quality Control Facility
WSA	Water Supply Assessment
WTP	Water Treatment Plant
ZEV	zero-emission vehicle
$\mu g/m^3$	micrograms per liter
^oF	Fahrenheit

TIERED INITIAL STUDY MITIGATED NEGATIVE DECLARATION

Project Title: 144-490 Quintal Road Project

Project Description: Quarterra Multifamily (Applicant) is proposing the 144-490 Quintal Road Project (Project) in Manteca, California. The Project involves the construction and operation of 672 multi-family for-rent apartments, 48 for-sale two-family units, and 98 single-family for-sale homes on an approximately 59.19-acre vacant site. The Project site consists of four parcels identified as Assessor Parcel Numbers (APNs) 224-040-52, 224-040-07, 224-040-06, and 224-040-11. The 672 multi-family apartments would be constructed in the northwestern and western portion of the site and the 98 single-family homes, and 48 two-family units would be constructed on the eastern and southern portion of the Project site.

The Project would also include the provision of an approximately 1.93-acre public open space, as well as resident-serving amenities for the multi-family components, including community gardens and orchard planting areas. Additionally, the Project would construct improvements to the adjacent streets, on and offsite utility infrastructure, parking, driveways, and landscaping. Section 2.0, Project Description, includes more detailed information about the Project.

The Project is requesting a General Plan Amendment to re-designate approximately 38.5 acres of the Project site as High Density Residential (HDR) and the remaining 20.7 acres as Low Density Residential (LDR). Additionally, the Project is requesting to rezone approximately 38.5 acres of the Project site to Multiple-Family Dwelling zoning district (R-3) for the multi-family and two-family homes, and the remaining 20.7 acres of the site to One-Family Dwelling zoning district (R-1) for the single-family uses.

Project Location: The Project is located at the juncture of Quintal Road, S. Main Street, and E. Atherton Drive in the City of Manteca, in San Joaquin County on an approximately 59.19-acre site. The Project site consists of four parcels identified as APNs: 224-040-52 (144 Quintal Road), 224-040-07 (292 Quintal Road), 224-040-06 (301 Quintal Road), and 224-040-11 (490 Quintal Road). The Project site is bordered by S. Main Street, vacant land, and commercial uses to the west and Highway 120 and commercial uses to the north. Existing residential development borders the Project site to the south and the east.

Name of Lead Agency:
City of Manteca Development Services Department
Planning Division
1215 W. Center Street, Suite 201
Manteca, CA 95337

Lead Agency Contact Information:
Toben Barnum, Associate Planner
Phone: (209) 456-8517
Email: tbarnum@manteca.gov

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The Project is requesting a General Plan Amendment to re-designate approximately 38.5 acres of the Project site as High Density Residential (HDR) and the remaining 20.7 acres as Low Density Residential (LDR). Additionally, the Project is requesting to rezone approximately 38.5 acres of the Project site to Multiple-Family Dwelling zoning district (R-3) for the multi-family and two-family homes, and the remaining 20.7 acres of the site to One-Family Dwelling zoning district (R-1) for the single-family uses.

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Toben Barnum, Associate Planner
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Determination: The City of Manteca has determined that a) all potentially significant or significant impacts required to be identified in the Tiered Initial Study Mitigated Negative Declaration (ISMND) have been identified and analyzed; and b) with respect to each potentially significant impact on the environment either of the following apply: 1) changes or alterations have been required in or incorporated into the Project that avoid or mitigate the potentially significant impacts to a level of less than significant; or 2) those changes or alterations are within the responsibility and jurisdiction of another public agency and have been, or can and should be, adopted by that other agency.

The Tiered ISMND and supporting documents are available at the City of Manteca Planning Division, located at 1215 W. Center Street, Suite 201 Manteca, California 95337, and online at the following URL: https://www.manteca.gov/departments/development-services/planning/planning-division-documents/-folder-206

By: _____ Date: August 21, 2024

Toben Barnum, Associate Planner

1.0 INTRODUCTION

Quarterra Multifamily (Applicant) is proposing the 144-490 Quintal Road Project (Project) in Manteca, California. The Project involves the construction and operation of 672 multi-family for-rent apartments, 48 for-sale two-family units, and 98 single-family for-sale homes on an approximately 59.19-acre vacant site. The Project site consists of four parcels identified as Assessor Parcel Numbers (APNs) 224-040-52, 224-040-07, 224-040-06, and 224-040-11. The 672 multi-family apartments would be constructed in the northwestern and western portion of the site and the 98 single-family homes, and 48 two-family units would be constructed on the eastern and southern portion of the Project site.

The Project would also include the provision of an approximately 1.93-acre public open space, as well as resident-serving amenities for the multi-family components, including community gardens and orchard planting areas. Additionally, the Project would construct improvements to the adjacent streets, on and offsite utility infrastructure, parking, driveways, and landscaping.

The Project is requesting a General Plan Amendment to re-designate approximately 38.5 acres of the Project site as High Density Residential (HDR) and the remaining 20.7 acres as Low Density Residential (LDR). Additionally, the Project is requesting to rezone approximately 38.5 acres of the Project site to Multiple-Family Dwelling zoning district (R-3) for the multi-family and two-family homes, and the remaining 20.7 acres of the site to One-Family Dwelling zoning district (R-1) for the single-family uses.

1.1 PROJECT TITLE

144-490 Quintal Road Project

1.2 LEAD AGENCY

City of Manteca Development Services Department
Planning Division
1215 W. Center Street, Suite 201
Manteca, CA 95337

1.1 LEAD AGENCY CONTACT

Toben Barnum, Associate Planner
Phone: (209) 456-8517
Email: tbarnum@manteca.gov

1.2 PROJECT LOCATION

The Project is located at the juncture of Quintal Road, S. Main Street, and E. Atherton Drive in the City of Manteca, in San Joaquin County on an approximately 59.19-acre site (Figure 1-1). The Project site consists of four parcels identified as APNs: 224-040-52 (144 Quintal Road), 224-040-07 (292 Quintal Road), 224-040-06 (301 Quintal Road), and 224-040-11 (490 Quintal Road). The Project site is bordered by S. Main Street, vacant land, and commercial uses to the west and Highway 120 and commercial uses to the north. Existing residential development borders the Project site to the south and the east (Figure 1-2).

1.3 EXISTING SITE CONDITIONS AND SURROUNDING LAND USES

The Project site is currently vacant and mostly covered by non-native grasses and weeds. Several unpaved roadways extend throughout the site. A paved roadway, referred as Quintal Road, also extends across the northwestern portion of the site, and connects to S. Main Street. The site topography is generally flat with an elevation of approximately 30 feet above mean sea level. The Project site is surrounded by urban development and is located in close proximity to services and major employers, including healthcare and medical services, retail, restaurant, and market/grocery. Land uses surrounding the Project site include single-family and multi-family residential uses to the east and south; Highway 120 and commercial uses to the north; and S. Main Street, vacant land, and commercial uses to west. There is a Chevron gas station located on S. Main Street and adjacent to the southwest corner of the Project site.

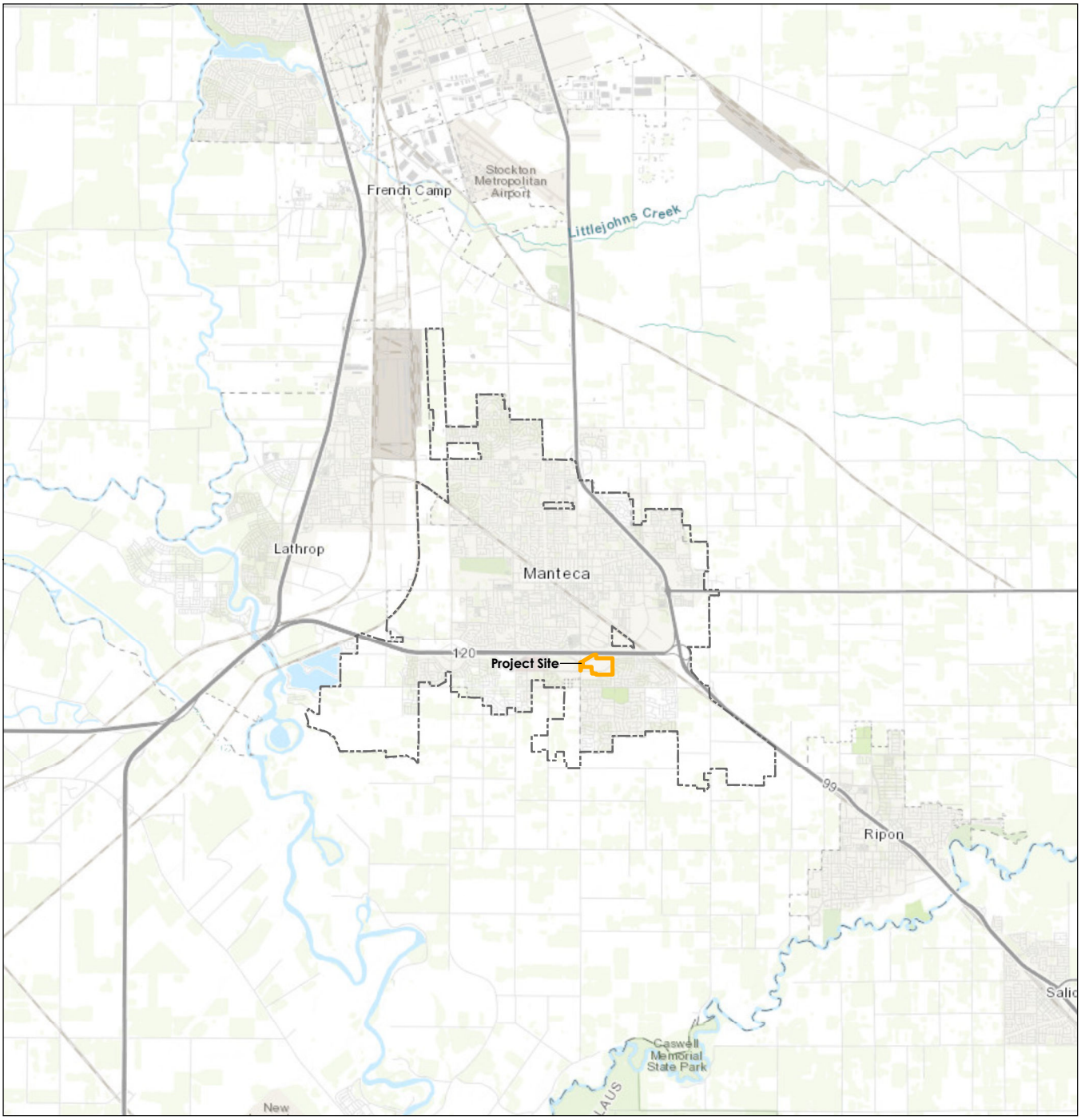
1.4 GENERAL PLAN AND ZONING DESIGNATIONS

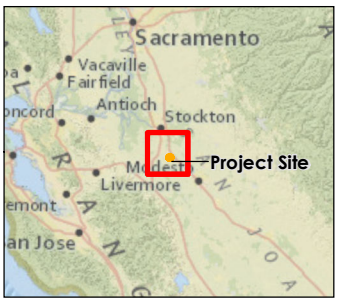
1.4.1 General Plan Land Use Designation

The City's General Plan Update currently designates the area north of E. Atherton Drive as Commercial Mixed-Use (CMU) and the area south of E. Atherton Drive as Medium Density Residential (MDR) (Figure 1-3). The Project is requesting a General Plan Amendment to re-designate approximately 38.5 acres of the Project site as HDR and the remaining 20.7 acres as LDR. The HDR land use designation would apply to the proposed multi-family and two-family homes in the northwestern portion of the Project site. The LDR land use designation would apply to the single-family uses in the northeastern and southern portions of the Project site (Figure 1-4).

According to the General Plan Update, the HDR land use designation has a standard of 20.1 to 30 dwelling units per acre and provides for multi-family townhome, condominium, apartment style housing, and mobile home parks. The multi-family dwelling sites are typically located with direct access to arterial streets. Sites should be located near a neighborhood park, a neighborhood commercial center, or jobs centers and should provide pedestrian and bicycle connections to these amenities and services.

The LDR land use designation has a standard of 2.1 to 8 dwelling units per acre and provides for a mix of single-family housing, including small lots, clustered lots, attached homes, and conventional large lot detached residences.





Legend

- Project Site
- City of Manteca

0 1 2 Miles

1:150,000
(At original document size of 8.5x11)

N

Stantec

Project Location
Manteca, California

Prepared by KJ on 2022-09-02

Client/Project
144-490 Quintal Road Project

Figure No.
1-1

Title
Regional Location

Notes
1. Coordinate System: NAD 1983 StatePlane California III FIPS 0403 Feet

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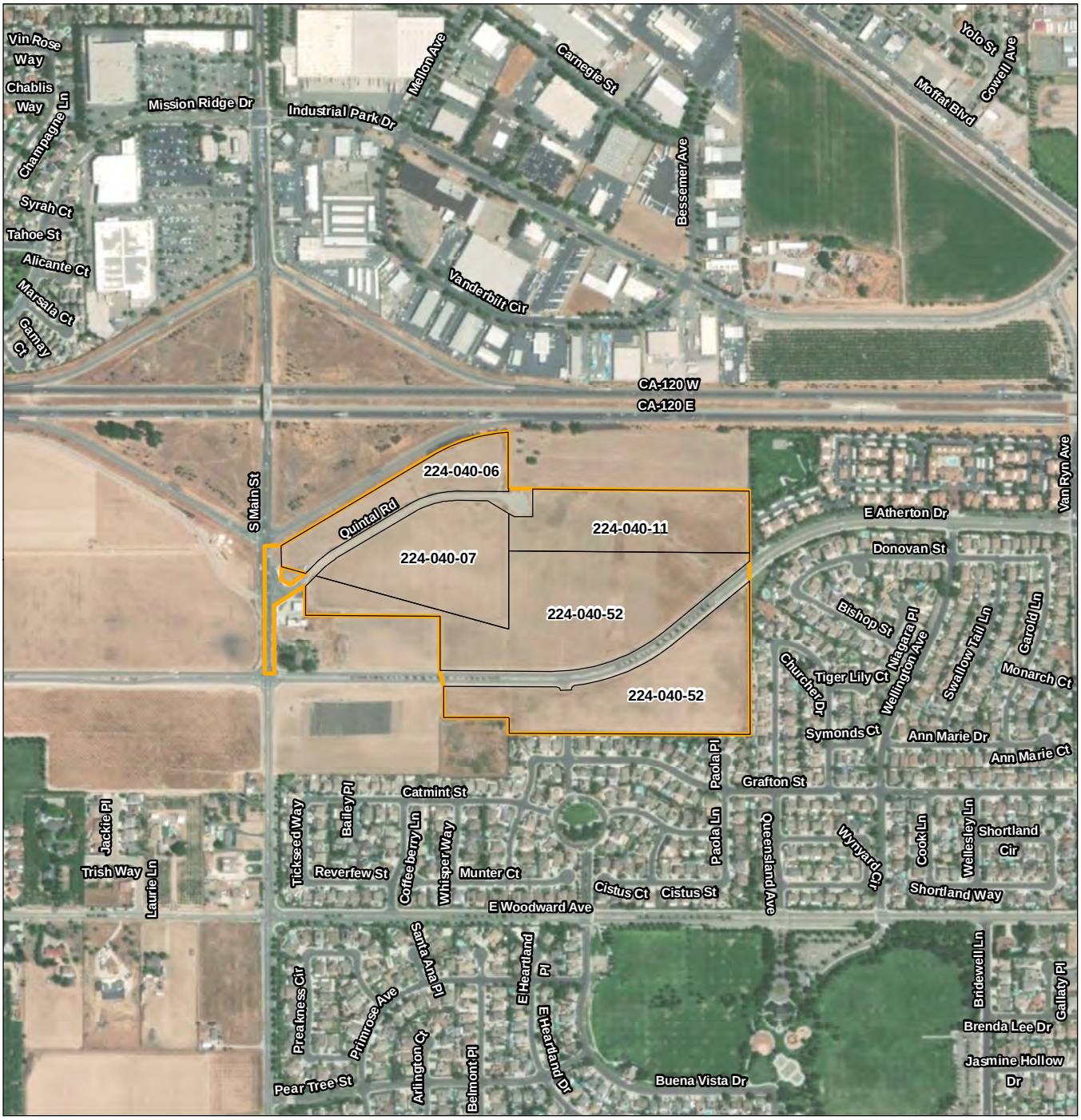

Notes
1. Coordinate System: NAD 1983 StatePlane California III FIPS 0403 Feet

Legend

Project Site

Assessor Parcel Number

0 300 600 Feet

1:10,000

(At original document size of 8.5x11)

N

Stantec

Project Location
Manteca, California

Prepared by KJ on 2022-09-02

Client/Project
144-490 Quintal Road Project

Figure No.
1-2

Title
Project Site

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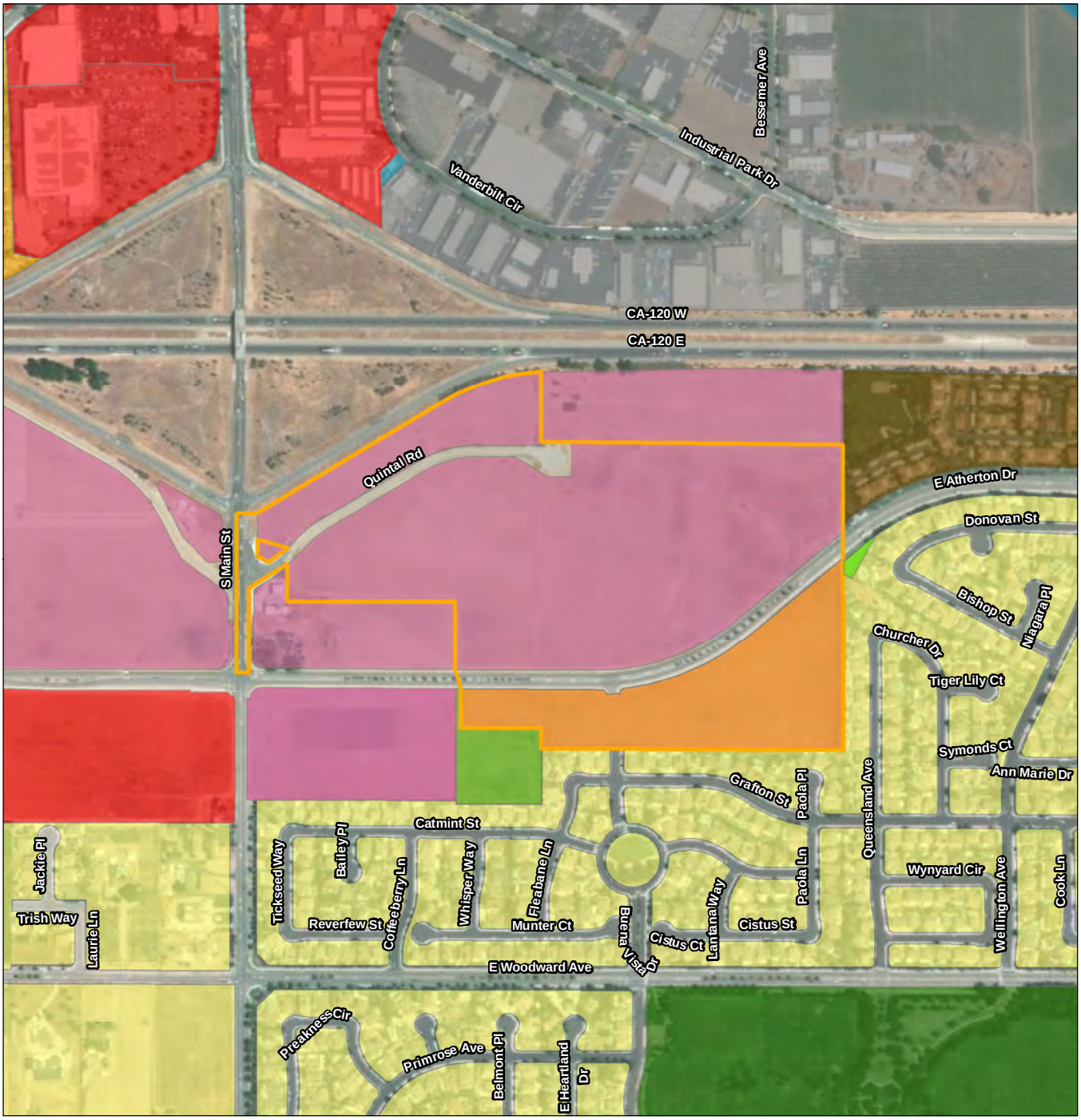

Notes
1. Coordinate System: NAD 1983 StatePlane California III FIPS 0403 Feet

Legend

- Project Site

General Plan Update Land Use Designation

- Commercial Mixed Use
- Commercial
- High Density Residential
- Light Industrial
- Low Density Residential
- Medium Density Residential
- Park
- Public/Quasi-Public
- Open Space

0 250 500 Feet
1:8,000
(At original document size of 8.5x11)

N

Stantec

Project Location
Manteca, California

Prepared by KJ on 2022-09-02

Client/Project
144-490 Quintal Road Project

Figure No.
1-3

Title
General Plan Update Land Use Designations

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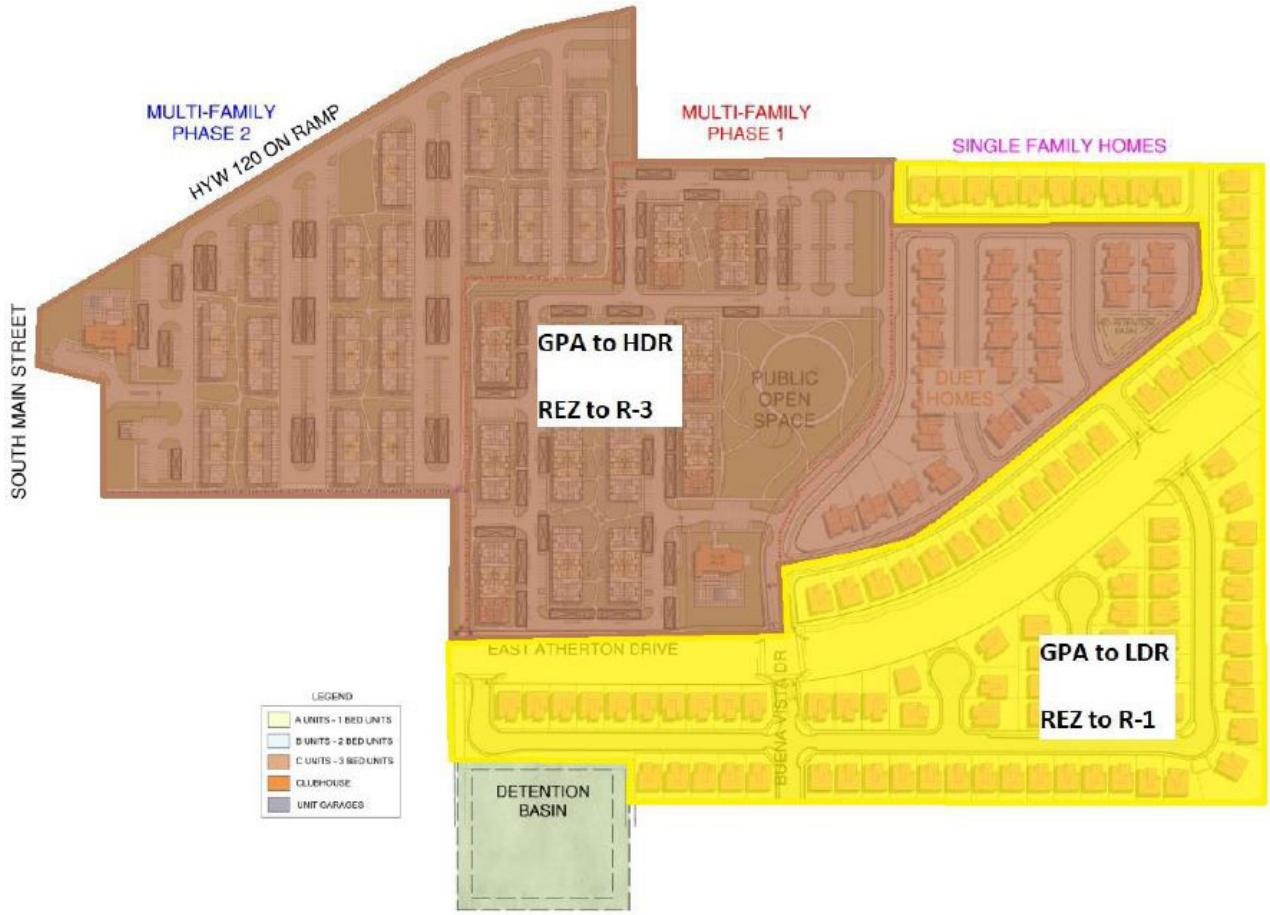


Source: Quarterra, June 2024

Stantec

Project Location
Manteca, California

Client/Project
144-490 Quintal Road Project

Figure No.
1-4

Title
Proposed General Plan Land Use Designations and Zoning

1.4.3 Zoning

The entire Project site is currently zoned CMU. The Project is requesting to rezone approximately 38.5 acres of the Project site to R-3 for the multi-family and two-family homes, and the remaining 20.7 acres of the site to R-1 for the single-family uses.

According to the City's Zoning Ordinance, the R-3 zoning district includes multi-family apartment-style housing. The multi-family dwelling sites are typically located with direct access to arterial streets, bicycle paths, and other transit options. The R-1 zoning district allows 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.

1.5 SCOPE OF THIS TIERED INITIAL STUDY

This environmental analysis is a Tiered Initial Study Mitigated Negative Declaration (ISMND) for the proposed 144-490 Quintal Road Project. This environmental analysis is tiered from the Manteca General Plan Update (General Plan Update) Program Environmental Impact Report (EIR) in accordance with Sections 15152 and 15168 of the CEQA Guidelines and Public Resources Code (PRC) Section 21094. The General Plan Update Program EIR was prepared pursuant to CEQA Guidelines Section 15168.

The CEQA concept of "tiering" refers to the evaluation of general environmental matters in a broad program-level EIR, with subsequent focused environmental documents for individual projects that implement the program. This environmental document incorporates by reference the discussions in the General Plan Update Program EIR and concentrates on Project-specific issues. The CEQA Guidelines encourage the use of tiered environmental documents to streamline the environmental review process. This is accomplished in tiered documents by eliminating repetitive analyses of issues that were adequately addressed in the Program EIR and by incorporating those analyses by reference.

Section 15168(d) of the State CEQA Guidelines provides for simplifying the preparation of environmental documents on individual parts of the program by incorporating by reference analyses and discussions that apply to the program as a whole. Where an EIR has been prepared or certified for a program or plan, the environmental review for a later activity consistent with the program or plan should be limited to effects that were not analyzed as significant in the prior EIR or that are susceptible to substantial reduction or avoidance (CEQA Guidelines Section 15152[d]).

The proposed Project would be consistent with the scope of the program as described in the General Plan Update Program EIR. Accordingly, pursuant to Section 15152 of the State CEQA Guidelines, it is appropriate to tier this ISMND from the General Plan Update Program EIR. This Tiered ISMND evaluates whether the environmental effects of the Project were adequately addressed in the General Plan Update Program EIR. For impacts that were adequately addressed, the Tiered ISMND provides a cross reference to the relevant discussion in the General Plan Update Program EIR. Project-specific impacts that were not addressed in the General Plan Update EIR are evaluated in detail in this document. Project-specific mitigation has been identified where required.

1.6 CEQA AND PUBLIC AGENCY REVIEW

CEQA requires that the Lead Agency disclose the significant impacts to the environment from proposed development applications. The intent of CEQA is to foster good planning and to consider environmental issues during the planning and development application review process. The City is the Lead Agency under CEQA for the preparation of this Tiered ISMND. Section 21067 of the CEQA Guidelines defines the Lead Agency as: "the public agency which has the principal responsibility for carrying out or approving a project which may have a significant effect upon the environment." Approval of the proposed project is considered a public agency discretionary action, and therefore is subject to compliance with CEQA. The City has directed the preparation of this analysis to comply with CEQA.

Stantec Consulting Services Inc. (Stantec) has prepared this document at the direction of the City. The purpose of this document is to disclose the environmental consequences of implementing the proposed project to decision-makers and the public. The public, City residents, and other local and state resource agencies will be given the opportunity to review and comment on this document during a 30-day public-review period. Comments received during the review period will be considered by the City prior to adoption of this ISMND and any City action on the project application.

The 30-day public review period will commence on **August 21, 2024** and end on **September 19, 2024**, pursuant to CEQA Guidelines Section 15073.[1] If you wish to send written comments (including via e-mail), they must be received by 5:00 p.m. on **September 19, 2024**. Written comments should be addressed to the following:

Toben Barnum, Associate Planner
City of Manteca Development Services Office
1215 W. Center Street, Suite 201 Manteca, CA 95337
Email: tbarnum@manteca.gov
Phone: (209) 456-8517

The Tiered ISMND and supporting documents are available at the City of Manteca, Development Services Office, located at 1215 W. Center Street, and online at the following URL: https://www.manteca.gov/departments/development-services/planning/planning-division-documents/-folder-206

[1] The Notice of Intent prepared for the Project states that the 30-day public review period will be extended for an additional two days, and thereby commencing on August 21, 2024 and ending on September 21, 2024 at 5:00 p.m., pursuant to Section 15073(b) of the CEQA Guidelines. Written comments should be addressed to the Lead Agency Contact listed in Section 1.6 of this document.

1.7 REQUIRED PERMITS AND APPROVALS

The following discretionary approvals and permits are anticipated for the Project:

City of Manteca

- General Plan Amendment
    - Re-designate property for two-family and multi-family uses from CMU to HDR
    - Re-designate property for single-family uses from MDR to LDR
- Rezone
    - Rezone property for multi-family and two-family uses from CMU to R-3
    - Rezone property for single-family uses from CMU to R-1
- Major Site Plan and Design Review
- Tentative Parcel Map

Other

- South San Joaquin Irrigation District (SSJID), specifically the relocation of their facilities Lateral-Y and Well 81
- Pacific Gas and Electric (PG&E) relocation and undergrounding of powerlines that run along Quintal Road
- California Department of Transportation (Caltrans) review of proposed improvements along S. Main Street

Other ministerial approvals, such as construction-related permits and City encroachment permits, may also be required. Additionally, the Project would be subject to the Manteca Municipal Code, including the zoning code, building code, and fire code.

1.8 DOCUMENT ORGANIZATION

This CEQA document is organized as follows:

Section 1.0: Introduction. This section introduces the Project and describes the purpose, location, existing setting and surrounding land uses, land use and zoning designations, required permits and approvals, scope of the Tiered ISMND, and organization of this document.

Section 2.0: Project Description. This section provides a detailed description of the Project.

Section 3.0: Environmental Checklist and Evaluation. This section presents an analysis of the range of potential environmental issues identified in the CEQA Environmental Checklist and determines whether the Project would be anticipated to result in no impact, a less than significant impact, a less than

significant impact with mitigation incorporated, or a potentially significant impact for each topic. If impacts are determined to be potentially significant after incorporation of applicable mitigation measures, a Project EIR would be required. For this Project, mitigation measures and/or policies and actions from the General Plan Update EIR have been incorporated, where needed, that would reduce all potentially significant impacts to a less than significant level.

Section 4.0: References. This section lists the references used in preparing this Tiered ISMND.

Section 5.0: List of Preparers. This section identifies the report preparers.

2.0 PROJECT DESCRIPTION

2.1 PROJECT OVERVIEW

The Project involves the development of 672 multi-family for-rent apartments, 48 for-sale two-family units, and 98 single-family for-sale homes on an approximately 59.19-acre vacant site. The Project site consists of four parcels identified as APNs 224-040-52, 224-040-07, 224-040-06, 224-040-11. The 672 multi-family apartments would be constructed in the northwestern and western portion of the site and the 98 single-family homes, and 48 two-family units would be constructed on the eastern and southern portion of the Project site (Figure 2-1).

The Project would also include the provision of an approximately 1.93-acre public open space, as well as resident-serving amenities for the multi-family components, including community gardens and orchard planting areas. Additionally, the Project would construct improvements to the adjacent streets, on and offsite utility infrastructure, parking, driveways, and landscaping.

The Project is requesting a General Plan Amendment to re-designate approximately 38.5 acres of the Project site as HDR and the remaining 20.7 acres as LDR. Additionally, the Project is requesting to rezone approximately 38.5 acres of the Project site to R-3 for the multi-family and two-family homes, and the remaining 20.7 acres of the site to R-1 for the single-family uses.

2.2 PROJECT CHARACTERISTICS

2.2.1 Single-Family Homes Component

The Project would construct 98 detached single-family for-sale homes on the northeastern and southern portions of the Project site. The single-family homes would offer three different floor plans consisting of single-story and two-story plans with two- to three-car garages and drive aprons that would be large enough for vehicle parking. The single-family homes would range from approximately 1,900 square feet to 3,300 square feet and include four to five bedrooms and two- to three-bathrooms, all with private open space consisting of a backyard. Lot coverage would range from 2,145 square feet per building to 2,400 square feet per building. The single-family housing component's height would vary depending on the proposed floor plan but would have a maximum height of 30 feet (Figure 2-2).

Access to the single-family neighborhoods would be from E. Atherton Drive with homes located north and south of E. Atherton Drive.

2.2.2 Two-Family Housing Component

The Project would construct 48 for-sale two-family housing typologies in the eastern portion of the Project site. Chapter 17.24.020, Allowed Use Definitions, of the Manteca Municipal Code defines two-family housing as: "An attached building (e.g., duplex) designed for occupancy by two households living independently of each other, where both dwellings are located on a single lot." Three home plans are proposed and configured into two attached units, each with a separate lot. The proposed homes include three, two-story floor plans, each with two-car garages and drive aprons that would be large enough for

vehicle parking. Home sizes would range from approximately 1,800 square feet to 2,300 square feet and would include three- to four-bedrooms and two- to three-bathrooms, with loft and office room options. All two-family units would include private open space consisting of a private backyard and one side yard. The two-family component would develop 24 attached units (48 two-family units) with lot sizes ranging from 3,500 square feet to 3,600 square feet and total coverage would range from 1,270 square feet to 1,622 square feet (Figure 2-3).

2.2.3 Multi-Family Housing Component

The Project would construct 672 high density multi-family apartments in the north and northwestern portions of the Project site. The apartment component would include two individual communities of 312 and 360 residential units in a three-story garden style apartment complex. The 672 residential units would be spread out across 31 three-story buildings with unit sizes ranging from 637 square feet to 1,434 square feet. The apartment units would range from one-bedroom units to three-bedroom units, with one to two bathrooms each. Overall, the 31 buildings would range from 7,700 square feet to 10,100 square feet.

The Applicant would develop two phases of apartment complexes at the same time, as two standalone, independent communities. The Phase I complex would consist of 312 residential units spread across 13 residential buildings while the Phase II complex would consist of 360 residential units spread across 18 residential buildings. Phase I would include 156 one-bedroom units, 120 two-bedroom units, and 36 three-bedroom units. Phase II would include 252 one-bedroom units and 108 two-bedroom units.

Private open space would be provided for each unit in the form of balconies for the upper-level units and patios for the ground level units. The Phase I complex buildings would have a maximum height of 34 feet 10 inches and the Phase II complex buildings would have a maximum height of 37 feet (Figure 2-4).

In addition to the residential buildings, the apartment component would construct two separate clubhouses with pool amenities, indoor community space, management office as well as three-stream waste management facilities, open spaces, and parking in each apartment complex. Each clubhouse would be approximately 5,000 square feet and would include the leasing office and manager offices for the associated apartment complex, as well as a fitness room, bathrooms, package centers, social/party lounge, and storage rooms. Each clubhouse and associated shared amenities would only be accessible to those living in the individual apartment complexes.

Phase I would include 244,300 square feet of open space and Phase II would include 282,900 square feet of open space. Additionally, the Project would include two community gardens and orchard planting areas within each multi-family component to encourage onsite urban agricultural activities. The two community gardens would total approximately 5,500 square feet and consist of individual garden containers with a small support structure to store tools. The orchard planting areas would total approximately 32,000 square feet and would be planted with a mixed variety of trees that produce fruit, including but not limited to, lime and lemon trees. The proposed community garden locations and orchard planting areas are shown in Figure 2-5.

Source: Sandis, February 2023

Project Location
Manteca, CA

Client/Project
144-490 Quintal Road Project

Figure No.
2-1

Title
Site Plan

Stantec

Refer to landscape drawings for wall, tree, and shrub locations

1A MEDITERRANEAN

Refer to landscape drawings for wall, tree, and shrub locations

2A MEDITERRANEAN

Refer to landscape drawings for wall, tree, and shrub locations

3A MEDITERRANEAN

Source: Kevin L. Crook Architect, Inc., June 2022

Stantec

Project Location

Manteca, CA

Client/Project

144-490 Quintal Road Project

Figure No.

2-2

Title

Single-Family Elevation

Early California Scheme 1

Mediterranean Revival Scheme 4

Source: BSB Design, June 2022

Stantec

Project Location
Manteca, CA

Client/Project
144-490 Quintal Road Project

Figure No.
2-3

Title
Two-Family Housing Elevation

Multi-family Garden Walk-up building type concept elevations.

Multi-family Tuck-under building type concept elevations.

Source: BSB Design, June 2022

Stantec

Project Location
Manteca, CA

Client/Project
144-490 Quintal Road

Figure No.
2-4

Title
Multi-family Apartment Elevation

COMMUNITY GARDEN & ORCHARD LOCATIONS

1 Community Garden (5,500 SF)

- individual garden containers with small support structure for storage of tools and other impliments

2 Orchard Plantings (32,000 SF)

- mixed variety of trees that produce fruit ie. avocado, lime, lemon...

Source: Groundworks Office, March 2023

Stantec

Project Location
Manteca, CA

Client/Project
144-490 Quintal Road Project

Figure No.
2-5

Title
Community Garden and Orchard Locations

2.2.4 Offsite Traffic Improvements

The Project would install a new curb and gutter and construct a new northbound lane of travel along S. Main Street between E. Atherton Drive and Highway 120 right-of-way. The new curb and gutter and travel lane improvements would tie into the existing eastbound on-ramp to Highway 120. The Project would also reconfigure and/or restripe the same S. Main Street segment in accordance with the new curb and gutter and travel lane improvements described above.

The Project proposes to upgrade the traffic signals at the intersection of S. Main Street and E. Atherton Drive, and both signals at the north and south intersections of S. Main Street and Highway 120 off- and on-ramps with modern traffic signal controllers (Figure 2-6a). The Project would also install a new traffic signal at the intersection of E. Atherton Drive and Buena Vista Drive, as it extends north across E. Atherton Drive (Figure 2-6b). Additionally, a crosswalk would be provided at the E. Atherton Drive and Buena Vista Drive intersection.

As shown in Figure 2-6b, the Project would extend a Class I bicycle path across the northern frontage of E. Atherton Drive. The Class I bicycle path would be designed and constructed per the City's standards for a 12-foot Class I bicycle path. Lastly, the Project would construct a new bus stop on E. Atherton to provide local bus service to the Project site and surrounding uses.

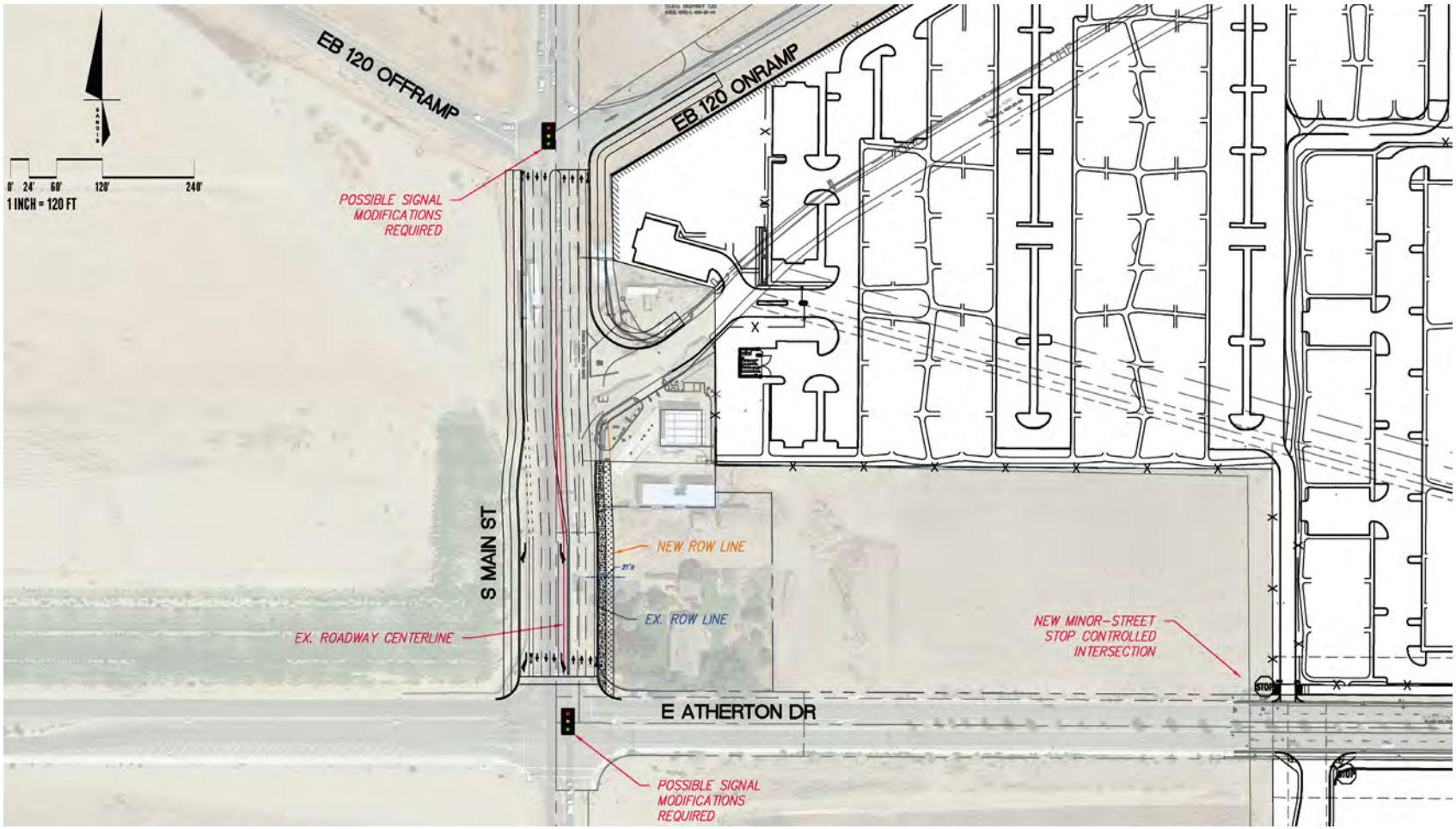
2.2.5 Future Residents Estimate

The City's General Plan Update EIR identified an average household size of 3.18 persons per household in 2020 for single-family and two-family housing typologies (City of Manteca 2022a). The City of Manteca Parks and Recreation Master Plan identified an average household size of 2.2 persons per household (City of Manteca 2016). Using an average household size of 3.18 persons per household for the single-family (98 units) and two-family (48 units) components, and 2.2 people per household for the multi-family component (672 units), the Project's development of 818 new housing units would result in an increase of 1,943 residents.

In addition, it is anticipated the apartment component would employ up to 11 staff members. The 11 staff members are anticipated to be a part of the local labor force and would support the two apartment complexes.

2.2.6 Landscaping

The Project would provide landscaping throughout the site. Landscaped areas include resting areas along paseos, and along the Project frontages. The Project would include the use of drought-tolerant and low water use plants. Trees and landscaping would be located along sidewalks, walkways, and medians throughout the site (Figure 2-7).



Source: Sandis, February 2023

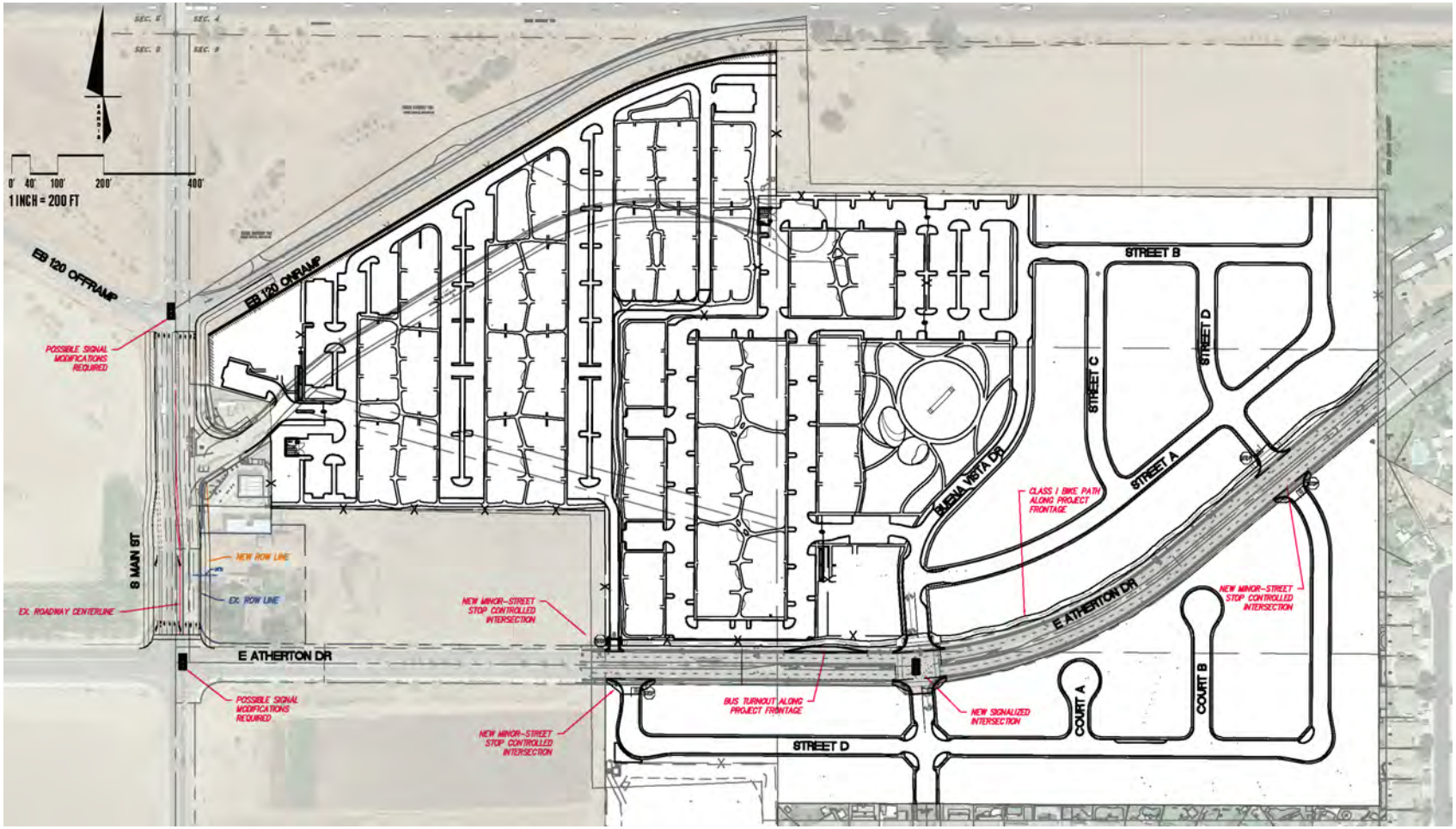
Stantec

Project Location
Manteca, CA

Client/Project
144-490 Quintal Road Project

Figure No.
2-6a

Title
Offsite Traffic Improvements - S. Main Street



Source: Sandis, February 2023

Stantec

Project Location
Manteca, CA

Client/Project
144-490 Quintal Road Project

Figure No.
2-6b

Title
Offsite Traffic Improvements - E. Atherton Drive

Source: BBS Design, November 2022

Project Location
Manteca, CA

Client/Project
144-490 Quintal Road Project

Figure No.
2-7

Title
Landscape Plan

Stantec

2.2.7 Open Space Area

The Project includes the development of an approximately 1.93-acre public open space. Central to the development, the public open space would provide open space designated for public use in the same way as a public park and offer green lawns and space for active and passive uses for all visitors. The public open space would include amenities such as a picnic area with shade canopy, active recreation court with cricket pitch, kids play area, multi-use pathways, strolling pathways, and a flex court. The public open space would be accessible to all area residents and visitors.

Private open space areas for the single-family component would be provided through backyards. Private backyard and side yard spaces would also be provided for the two-family component. Open space for the multi-family component would be provided through a combination of private and common areas. Private balconies would be provided for the upper-level units, and patios would be provided for the ground level units.

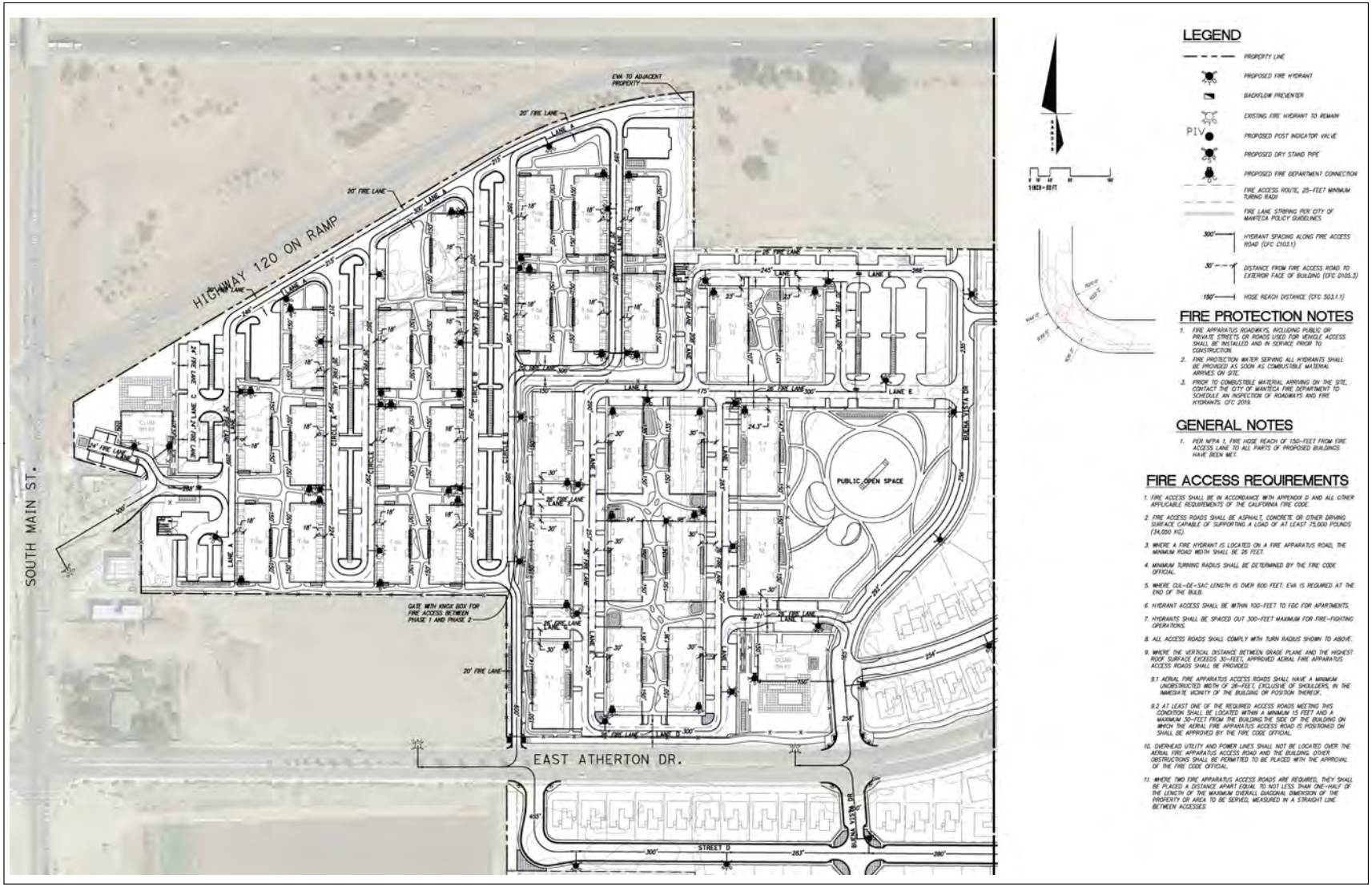
Common open space within the apartment complexes would include landscaped paseos and open space, as well as two community gardens and orchard planting areas. The two community gardens would total approximately 5,500 square feet and consist of individual garden containers with a small support structure to store tools (Figure 2-5). The orchard planting areas would total approximately 32,000 square feet and would be planted with a mixed variety of trees that produce fruit, including but not limited to, lime and lemon trees. These areas would only be accessible to those residing in the apartment complexes.

2.2.8 Vehicular Access

Primary access to the new developments would be through the abandoned but existing Quintal Road segment, located off S. Main Street, and Buena Vista Road that would be extended across E. Atherton Drive. As shown in Figure 2-6a, access to and from the Project site would be right in and right out from S. Main Street at Quintal Road. There would be no left turn in or out onto S. Main Street from Quintal Road as a median on S. Main Street would block access. The entrance to the Phase II apartment complex from S. Main Street would be gated and only accessible to residents. The Phase I apartment complex would be accessible via two gated entrances, located off the new Buena Vista Road extension.

As shown in Figure 2-6b, the Project would install a new traffic signal at the intersection of E. Atherton Drive and Buena Vista Road to provide access to the northern and southern portions of the Project site. Additionally, Street D would provide secondary access from E. Atherton Drive for the Phase III single-family and two-family homes. Street D would be a stop-controlled intersection and would have limited turn in/turn out ability due to the existing central median along E. Atherton Drive.

The extended Buena Vista Road segment would have an 80-foot right-of-way. All other proposed internal drive lanes and residential streets would range from 20 to 26 feet in width in accordance with the City's requirements to provide access for emergency fire apparatus. As required by the City's Fire Marshall, the Project would also construct a 20-foot emergency vehicle access (EVA) lane between the two multi-family complexes. This lane would provide one-way access for emergency fire apparatus and residents of the multi-family developments to exit the Project site and turn right onto E. Atherton Drive. The exit would be gated and equipped with an electronic switch/opticon system. The Project's fire access plans are shown in Figures 2-8a and 2-8b.



Source: Sandis, January 2023

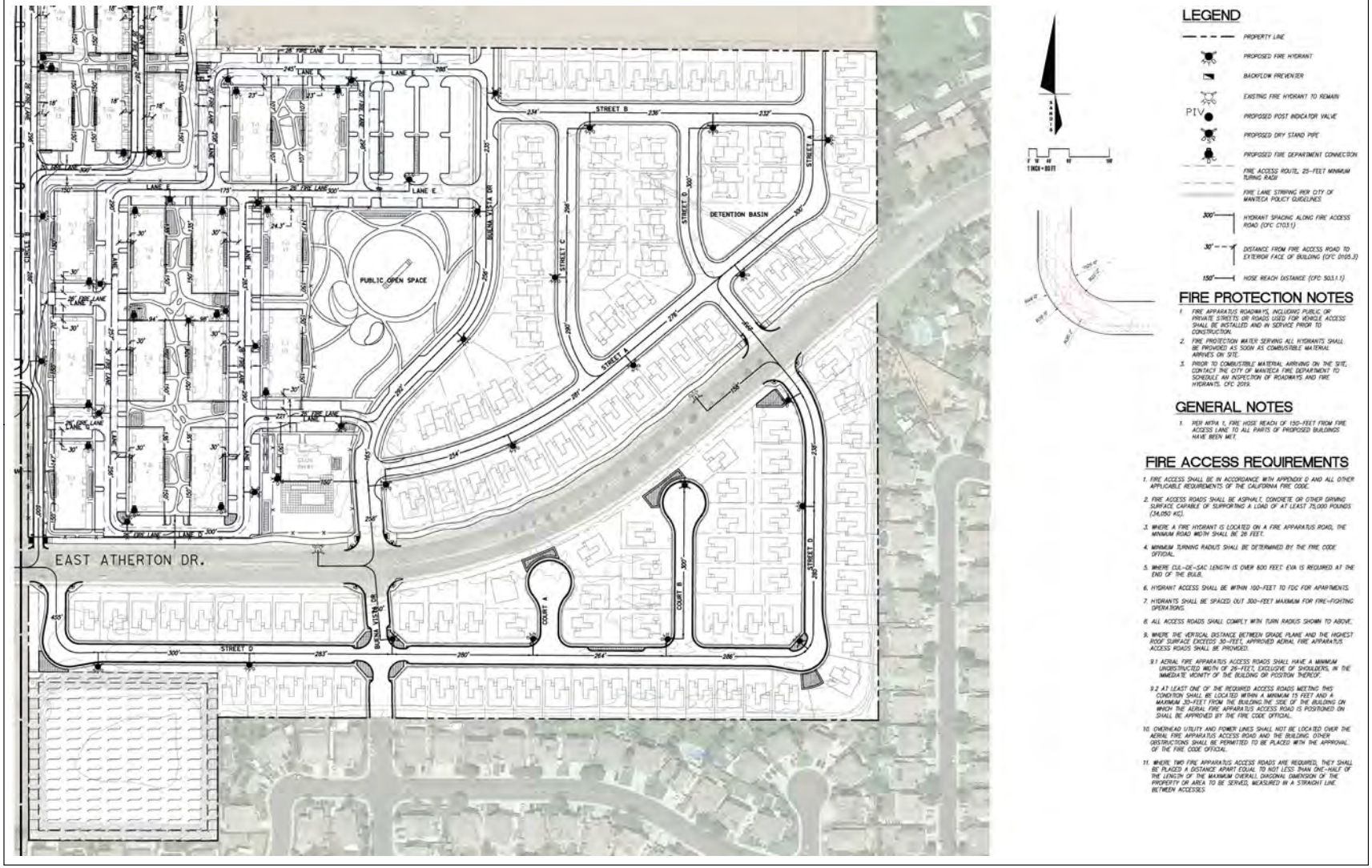
Project Location
Manteca, CA

Client/Project
144-490 Quintal Road Project

Figure No.
2-8a

Title
Fire Access Plan - E. Atherton Drive (North)

Stantec



Source: Sandis, January 2023

Project Location
Manteca, CA

Client/Project
144-490 Quintal Road Project

Figure No.
2-8b

Title
Fire Access Plan - E. Atherton Drive (South)

Stantec

2.2.9 Parking

As summarized in Table 2.2-1, the Project would provide 1,437 parking spaces, of which 262 would be electric vehicle (EV) spaces per California Green Building Standards Code (CalGreen) requirements. Of the 262 EV spaces, 58 EV spaces would be fully functional on day one of operation and 204 EV spaces would be pre-wired for future use. Additionally, the Project would provide 23 accessible parking spaces, four of which would be van accessible, per California Building Code (CBC) requirements.

The single-family and two-family homes would each provide two- to three-car garages with drive aprons that would be large enough for vehicle parking. The proposed parking for the Project meets or exceeds the parking requirements as outlined in the Manteca Municipal Code Section 15.52.050 and CalGreen Code Sections 4.106.4.1 and 4.106.4.2.2.

Table 2.2-1: Parking Ratio Calculations

Phase	Total Parking Spaces Required	Total Parking Spaces Provided
Phase I (Multi-family)	546	551
Phase II (Multi-family)	594	594
Phase III (Single-family and Two-family)	184	292
Total	**1,324**	**1,437**

Chapter 17.52.110, Table 17.52.110-1 of the Manteca Municipal Code requires the provision of 10 bicycle parking spaces for projects that provide greater than 400 parking spaces. Per CalGreen requirements, one bicycle parking space is required per every two dwelling units. Therefore, 156 bicycle parking spaces would be provided for Phase I, 180 bicycle parking spaces would be provided for Phase II, and 73 bicycle parking spaces would be provided for Phase III, for a total of 409 parking spaces. The Project's bicycle parking would exceed the City's requirements and comply with CalGreen standards.

2.2.10 Lighting and Security

Exterior lighting would be provided throughout the site for security and safety purposes. Exterior lighting provided would include pole lighting and wall mounted exterior lights. A 6-foot fence would surround the two apartment complexes, and each would have gated entry into the respective complex.

2.2.11 Utilities

Water Supply

There are existing water mains located along E. Atherton Drive and S. Main Street. The existing water mains would not require upsizing or relocation to implement the Project. The Project would install new 8-inch water mains throughout the site, which would connect to the existing water mains located within E. Atherton Drive and S. Main Street. Additionally, the Project would construct new fire hydrants throughout the Project site. All water distribution improvements for the Project would be constructed and designed in accordance with the City's standards and specifications. The Project utility plans are shown in Figures 2-9a and 2-9b.

Wastewater

There are existing sanitary sewer mains located within E. Atherton Drive and S. Main Street. The existing sanitary sewer mains would not require upsizing or relocation to implement the Project. The Project would construct new 6-inch sanitary sewer mains throughout the site, which would connect to 4-inch private lines that serve each individual proposed structure. The 6-inch sewer mains would ultimately connect to the existing sanitary sewer mains located within E. Atherton Drive and S. Main Street. The sewer system for the Project has been designed to be gravity systems. All sewer distribution improvements would be constructed and designed in accordance with the City's standards and specifications.

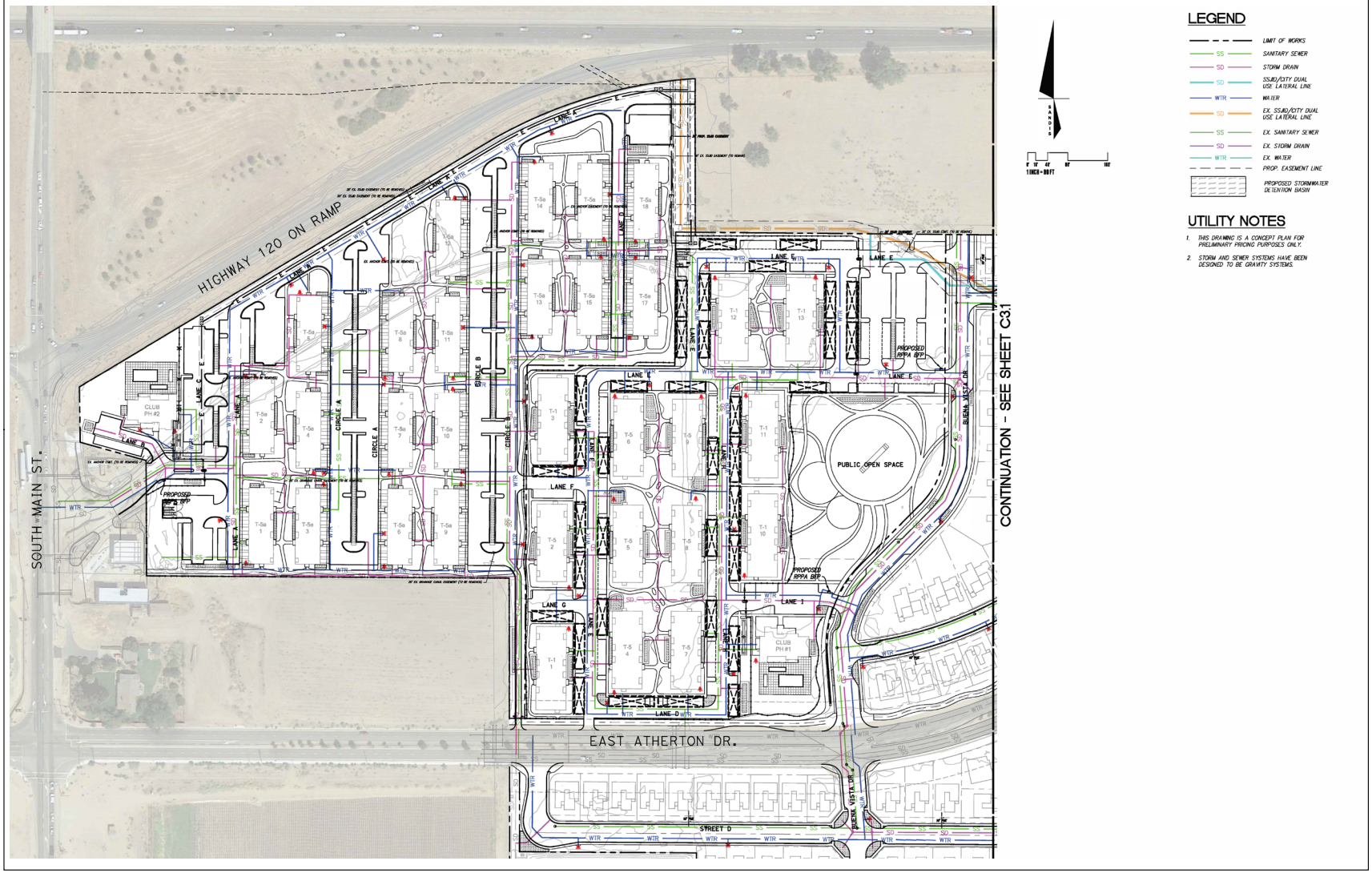
Stormwater

The Project proposes to utilize the existing 2.88-acre detention basin located adjacent to the southwest corner of the Project site to provide stormwater detention onsite. The existing detention basin has been sized to attenuate a 10-year, 48-hour storm event and has been designed to empty within a maximum of 96 hours. Flow through planters and bioretention basins would be utilized throughout the site to capture stormwater flows to be conveyed to the detention basin.

The City's stormwater drainage system is managed by the City's Public Works Department. The Project would tie into the City's existing 48-inch diameter stormwater drainage system, located within E. Atherton Drive. Additionally, the Project would relocate the existing 48-inch diameter South San Joaquin Irrigation District (SSJID)/City dual use lateral line that runs through the northeastern portion of the Project site. As shown on Figure 2-9b, the dual use lateral line would be relocated within a new 30-foot easement along Buena Vista Drive, Street B, and Street D before finally tying back into E. Atherton Drive.

Electricity

The Project would be 100 percent electric and would not rely on natural gas. The proposed buildings would be designed in accordance with CalGreen Tier 1 energy efficiency standards, which requires filters with a Minimum Efficiency Reporting Value (MERV) of 13 to be installed prior to occupancy. Solar panels would also be provided on the roofs of the single-family homes and on the covered parking spaces for the multi-family component. Pacific Gas and Electric (PG&E) currently provides electrical service to the Project site. The Project would relocate and underground (PG&E Rule 20) approximately 2,000 feet of power lines that extend along Quintal Road and terminate at the intersection of S. Main Street and E. Atherton Drive. The undergrounded power lines along S. Main Street would allow for the additional lane of travel referenced in Section 2.2.4, Offsite Traffic Improvements.



Source: Sandis, August 2024

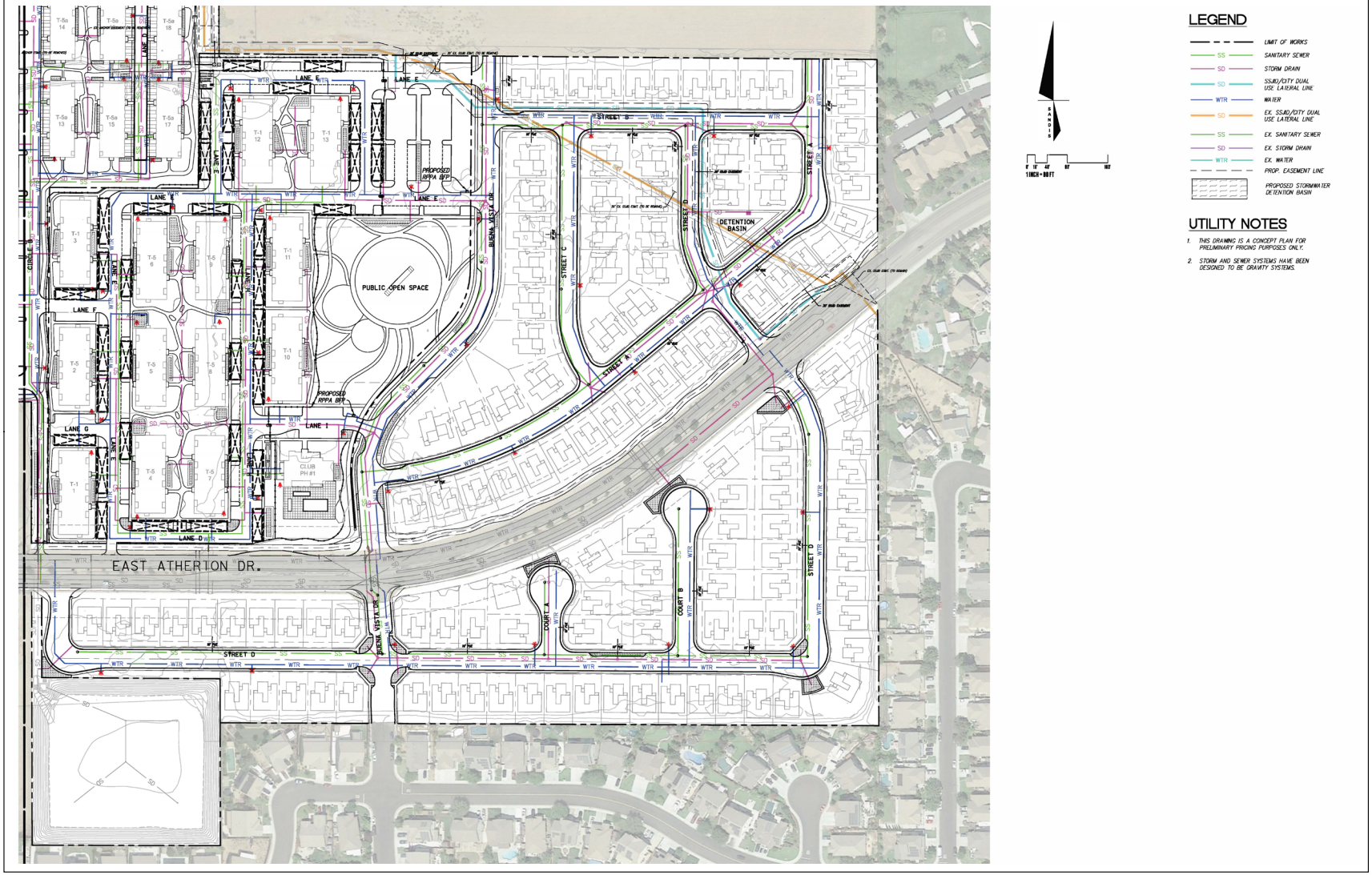
Stantec

Project Location
Manteca, CA

Client/Project
144-490 Quintal Road Project

Figure No.
2-9a

Title
Utility Plan - E. Atherton Drive (North)



Source: Sandis, August 2024

Project Location
Manteca, CA

Client/Project
144-490 Quintal Road Project

Figure No.
2-9b

Title
Utility Plan - E. Atherton Drive (South)

Stantec

2.3 PROJECT CONSTRUCTION

2.3.1 Construction Schedule

It is anticipated Project construction would take about 3 years to complete, starting in January 2025 and ending in July 2028. Project construction would include pre-construction activities involving the relocation and undergrounding of the existing PG&E powerlines that extend along Quintal Road, as well as the relocation of the SSJID/City dual use lateral line that runs through the northeastern portion of the Project site. The residential components would be constructed in two phases. Phase A would include construction of the two-family and single-family residential typologies (Phase III). Phase B would include development of the apartment components (Phases I and II). It is anticipated Phase A would take place over 2 years with construction starting in July 2025 and complete in October 2027. Phase B would be constructed over the same time and would be complete by July 2028. The offsite improvements would occur after Phase A has been completed around November 2027 and would last approximately eight months.

All construction activities would be consistent with the requirements of the Manteca Municipal Code and would occur between 7:00 AM to 7:00 PM on Monday through Friday, and 8:00 AM to 6:00 PM on Saturdays. No construction would be permitted outside of these hours or on Sundays or federal holidays.

2.3.2 Access and Staging

All construction materials would be stored onsite, and construction of the Project is not anticipated to require road closures.

2.3.3 Construction Equipment and Workers

The Project's Phase A and Phase B construction would require equipment typical for site preparation, grading, building construction, paving, and architectural coating activities. Additionally, construction of the offsite improvements would require equipment typical for grubbing and land clearing, grading and excavation, drainage, utilities, subgrade work, and paving. The Project would use off-road diesel-powered construction equipment that meets the US Environmental Protection Agency (USEPA) or Air Resources Board's (ARB) Tier 4 off-road emissions standards.

The Project's Phase A construction is expected to require approximately 100 workers during the peak construction stage. Peak construction traffic is anticipated to require approximately 275 off-haul truck trips per day. The Project's Phase B construction is expected to require approximately 150 workers during the peak construction stage. Peak construction traffic is anticipated to require approximately 300 off-haul truck trips per day.

2.3.4 Construction Activities

The Project site consists mostly of pervious areas. The Project is anticipated to disturb a total of 64 acres and would develop 46 acres of impervious surfaces and 18 acres of pervious surfaces, which would include landscaped areas and open spaces. The Project is anticipated to have a maximum excavation depth of 10 feet. The Project is anticipated to require a cut volume of 65,600 cubic yards and fill volume of 63,600 cubic yards for a total net volume of 2,000 cubic yards. The Project would involve soil disturbing activities, and therefore would implement best management practices in compliance with SJVAPCD Regulation VIII, Fugitive Dust Prohibitions, to limit dust emissions generated from construction.

3.0 ENVIRONMENTAL CHECKLIST AND EVALUATION

The environmental factors checked below would be potentially affected by this Project, involving at least one impact that requires mitigation to reduce the impact from "Potentially Significant" to "Less Than Significant" as indicated by the checklist on the following pages.

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

Evaluation of Environmental Impacts

Section 3.0, Environmental Checklist and Environmental Evaluation, presents the environmental checklist form found in Appendix G of the CEQA Guidelines. The checklist form is used to describe the impacts of the project. A discussion follows each environmental issue identified in the checklist. Included in each discussion are project-specific mitigation measures, if needed.

For the checklist, the following designations are used:

Potentially Significant Impact: An impact that could be significant and for which mitigation to reduce the impact to a less than significant level has not been identified. If any potentially significant impacts are identified, an EIR must be prepared. A Project EIR would be prepared if there are potentially significant impacts that cannot be mitigated.

Less Than Significant with Mitigation Incorporated: This designation applies when revisions in the Project plans or proposals have been made or agreed to by the Applicant that would avoid or mitigate a potentially significant effect to a less than significant level.

Less Than Significant Impact: Any impact that would not be considered significant under CEQA, relative to existing standards.

No Impact: The Project would not have any impact.

3.1 AESTHETICS

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

3.1.1 Environmental Setting

Visual Character of the Project Site

The Project site is currently vacant and mostly covered by non-native grasses and weeds. Several unpaved roadways extend throughout the site. A paved roadway, referred as Quintal Road, also extends across the northwestern portion of the site, and connects to S. Main Street. The site topography is generally flat with an elevation of approximately 30 feet above mean sea level. The Project site is surrounded by urban development and is in close proximity to services and major employers, including healthcare and medical services, retail, restaurant, and market/grocery. Land uses surrounding the Project site include single-family and multi-family residential uses to the east and south; Highway 120 and commercial uses to the north; and S. Main Street, vacant land, and commercial uses to west. There is a Chevron gas station located on S. Main Street and adjacent to the southwest corner of the Project site.

The Project site does not contain any existing sources of light or glare. Nighttime lighting within the immediate vicinity consists of street lighting, vehicle headlights on the adjacent streets and highways, and exterior lighting associated with the nearby developments.

Scenic Resources and Corridors

Manteca's visual character is shaped by its agricultural heritage and suburban development pattern. Farmland and open space, interspersed with rural residential, agricultural, and industrial uses, generally border the City to the north, south, and east. Agricultural lands have become important visual resources that contribute to the community identity of Manteca, and the Central Valley region. Water resources are also important visual resources that draw tourists to the area for recreational opportunities, provide critical habitat, and provide for scenic areas within and surrounding urban areas. The San Joaquin River is most

notable water body in the region, located along the southwestern border of the City (City of Manteca 2022a).

Caltrans manages the California Scenic Highway Program. The goal of the program is to preserve and protect scenic highway corridors from changes that would affect the aesthetic value of the land adjacent to the highways. According to the California State Scenic Highways System Map, the segment of Interstate 580 from Interstate 5 to State Route 205 is the only officially designated State scenic highway in San Joaquin County. The City of Manteca is not visible from this roadway segment (City of Manteca 2022a).

3.1.2 Previous Environmental Analysis

City of Manteca General Plan Update EIR

According to the General Plan Update EIR, there are no officially designated scenic vista points or State scenic highways within the City. The most significant visual features within or adjacent to the City are the San Joaquin River located to the west of the City and the agricultural land and open space located in undeveloped areas within and surrounding the City (City of Manteca 2022a). The General Plan Update could lead to new and expanded urban and suburban development throughout the City. However, any development occurring under the General Plan Update would be subject to compliance with the General Plan policies and existing design guidelines, and the regulations set forth in the Manteca Municipal Code, including the City's Zoning Code. According to the General Plan Update EIR, the City intends to update the Zoning Code along with the General Plan Update, in compliance with State law that requires the Zoning Code to be consistent with the General Plan. Development as a result of the General Plan Update would be required to be consistent with the Zoning Code. Therefore, the General Plan Update EIR determined new development would not substantially degrade the existing visual character or quality of public views, or conflict with applicable zoning or other regulations governing scenic quality and the impact would be less than significant (City of Manteca 2022a).

Additionally, most of the City is urbanized and already generates substantial sources of light and glare. New development under the General Plan Update would introduce new sources of daytime glare and nighttime lighting; however, such potential impacts would be most severe in areas that do not currently experience high levels of daytime glare and nighttime lighting. Future development would be required to be consistent with the General Plan, as well as lighting and design requirements in the Manteca Municipal Code, including Chapter 17.50, Lighting, which requires the preparation of an outdoor lighting plan as part of each Site Plan and Design Review application. Additionally, Section 17.50.060 of the Manteca Municipal Code, requires outdoor lighting to be designed, located, installed, directed downward or toward structures, shielded, and maintained in order to prevent glare, light trespass, and light pollution. Therefore, the General Plan Update EIR determined impacts related to light and glare would be less than significant (City of Manteca 2022a).

3.1.3 Project-Specific Impact Analysis

Impact AES-1	Have a substantial adverse effect on a scenic vista?

Impact Analysis
The Project site consists of a 59.19-acre vacant site mostly covered by non-native grasses and weeds. Land uses surrounding the Project site include single-family and multi-family residential uses to the east and south; Highway 120 and commercial uses to the north; and S. Main Street, vacant land, and commercial uses to west. There is a Chevron gas station located on S. Main Street and adjacent to the southwest corner of the Project site. As the Project site is within an area that is mostly built out with residential and highway commercial uses, there are no direct views of the expansive open space areas or agricultural lands within or surrounding the City. The San Joaquin River is also more than 5 miles to the west of the Project site and not visible. Therefore, the Project would have no impact on scenic vistas or visual features within or adjacent to the City.

Level of Significance Before Mitigation
No Impact.

Mitigation Measures
No mitigation is necessary.

Level of Significance After Mitigation
No Impact.

Impact AES-2	Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a State scenic highway?

Impact Analysis
The segment of Interstate 580 from Interstate 5 to Interstate 205 is the only officially designated State scenic highway in San Joaquin County. The Project site is more than 14 miles northeast of this segment of Interstate 580 and not visible from this highway (Caltrans 2024). Therefore, the Project would not damage scenic resources within a State scenic highway and there would be no impact.

Level of Significance Before Mitigation
No Impact.

Mitigation Measures
No mitigation is necessary.

Level of Significance After Mitigation
No Impact.

Impact AES-3	**In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point.) If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?**

Impact Analysis

The Project site consists of a 59.19-acre vacant site located south of Highway 120. This portion of the City is mostly built out with residential and highway commercial uses. Land uses surrounding the Project site include single-family and multi-family residential uses to the east and south; Highway 120 and commercial uses to the north; and S. Main Street, vacant land, and commercial uses to the west. There is a Chevron gas station located on S. Main Street and adjacent to the southwest corner of the Project site. The Project would develop the site with 818 residential units consisting of 672 multi-family for-rent apartments, 48 for-sale two-family units, and 98 single-family for-sale homes.

The General Plan Update currently designates the portion of the Project site north of E. Atherton Drive as CMU, and the portion south of E. Atherton Drive as MDR. The Project is requesting a General Plan Amendment to re-designate the northwestern portion of the Project site as HDR for the proposed multi-family and two-family homes, and the northeastern and southern portions of the Project site as LDR for the single-family uses. Additionally, the Project would rezone the northwestern portion of the Project site to R-3 to align with the HDR land use designation. The northeastern and southern portions of the Project site would be rezoned to R-1 to align with the LDR land use designation.

While the Project is requesting a General Plan Amendment and rezone, the Project would develop the site with a mix of housing typology uses comprising a high-density use, including multi-family, single-family, and two-family uses as evaluated in the General Plan Update and General Plan Update EIR. The proposed Project would not cause an impact greater than what has already been considered in the City's certified EIR. Furthermore, the Project would be subject to the development standards for the R-3 and R-1 zoning districts, which allows a maximum height of 55 feet and 30 feet, respectively. The Project would be consistent with the maximum height requirements for the R-3 and R-1 zoning districts with the buildings for the multi-family component ranging from 34 to 37 feet tall, and the two-family and single-family homes up to 30 feet tall.

Additionally, the Project would require Major Site Plan and Design Review as required by Section 17.10.060 of the Manteca Zoning Code and comply with the following policies from the General Plan Update to ensure that the proposed uses and buildings are compatible with the surrounding land uses:

- **Policy LU-3.2:** Require the design of new residential development to be consistent with any applicable design guidelines, including complete streets standards, to ensure harmony with Manteca's unique character and compatibility with existing surrounding land uses.
- **Policy CD-1.1:** Require development projects to preserve positive characteristics and unique features of the site and consider the scale and character of adjacent uses.
- **Policy CD-1.2:** Maintain and enhance the city's compact and cohesive urban form.

- **Policy CD-2.7:** Ensure that new development and redevelopment reinforces desirable elements of its neighborhood, district, or center, including architectural style, scale, and setback patterns.
- **Policy CD-2.8:** For infill development, incorporate context sensitive design elements that maintain compatibility and raise the quality of the area's architectural character.
- **Policy CD-6.1:** Encourage the mixing of land uses, where appropriate, but provide physical separation and/or buffers between incompatible land uses.

As such, the Project would not conflict with applicable zoning or other regulations governing scenic quality, and impacts would be less than significant.

Level of Significance Before Mitigation
Less Than Significant Impact.

Mitigation Measures
No mitigation is necessary.

Level of Significance After Mitigation
Less Than Significant Impact.

Impact AES-4	**Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?**

Impact Analysis
The Project site is currently vacant and does not contain existing sources of light and glare. Nighttime lighting within the immediate vicinity consists of street lighting, vehicle headlights on the adjacent streets and highways, and exterior lighting associated with the nearby developments. Glare from adjacent land uses emanates from parked cars, passing cars, and windows on nearby buildings. The Project would provide exterior lighting for security and safety purposes. Exterior lighting provided would include pole lighting and wall mounted exterior lights. The Project would be required to comply with the lighting requirements in Chapter 17.50, Lighting, of the Manteca Municipal Code, which requires preparation of a lighting plan and contains standards and provisions related to exterior lighting such as, but not limited to, shielding, level of illumination, and height requirements. Therefore, with compliance with the City's lighting and glare standards, the Project would not result in a new source of substantial light or glare and impacts would be less than significant.

Level of Significance Before Mitigation
Less Than Significant Impact.

Mitigation Measures
No mitigation is necessary.

Level of Significance After Mitigation
Less Than Significant Impact**.**

3.2 AGRICULTURE AND FORESTRY RESOURCES

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

3.2.1 Environmental Setting

San Joaquin County (County) is one of the nation's top ten agricultural areas in productivity and market value, and agriculture in the County is a $2 billion annual industry (San Joaquin County 2014). San Joaquin County agricultural crops and commodities vary annually on their individual rankings based on the amount of acreage dedicated to each commodity. In 2021, the gross value of agricultural production was over $2.5 billion (San Joaquin County 2022).

According to the California Department of Conservation (DOC) Division of Land Protection's Farmland Mapping and Monitoring Program (FMMP), the County lost 22,359 acres of Important Farmland between 1990 and 2018 (DOC 2018). Approximately 53,331 acres of agricultural land uses in the County, including Important Farmland, were converted to urbanized uses during the same timeframe. Additionally, according to the San Joaquin County General Plan, as of 2010, there are approximately 533,000 acres of Williamson Act lands that exist within the County. Approximately 38,500 acres of County Williamson Act lands (both prime and non-prime lands) are currently under non-renewal. Additionally, the County contains an additional 60,000 acres of land that are designated as Farmland Security Zone lands, which are areas where contracts are of longer duration than regular Williamson Act contracts, initially at least 20-year terms (San Joaquin County 2014).

Based on the FMMP data, the Project site consists of 44.34 acres of Farmland of Statewide Importance, 17.21 acres of Farmland of Local Importance, and 1.68 acres of Urban and Built-up Land. According to the City's General Plan Update EIR, the City's Planning Area includes approximately 1,375 acres of lands that are under a Williamson Act contract (City of Manteca 2022a). The Project site does not contain any parcels under a Williamson Act contract or Farmland Security Zone contract.

3.2.2 Previous Environmental Analysis

City of Manteca General Plan Update EIR

As discussed in the General Plan Update EIR, the General Plan Update has the potential to convert farmland to non-agricultural uses. The General Plan Update includes policies and actions that are intended to reduce the conversion of farmlands, including Williamson Act contract land. In order to mitigate and offset the loss of valuable farmland resources, the City requires an Agricultural Mitigation Fee for any discretionary land use entitlement which will permanently change agricultural land over 1 acre in size within the City's jurisdiction to any non-agricultural use. The in-lieu fee, paid to the City is distributed to the Central Valley Farmland Trust on a quarterly basis. The Central Valley Farmland Trust then acquires conservation easements from the funds collected. The City also implements a Right-to-Farm ordinance to prevent the loss of agricultural resources and damage to the local agricultural industry by creating a presumption that proper agricultural operations may not be deemed a public nuisance. While these City programs and the policies and actions in the General Plan Update would minimize impacts on agricultural lands, the impact would not be reduced to a less than significant level as agricultural land would still be permanently converted to urban uses. Therefore, the General Plan Update EIR determined impacts related to the conversion of Important Farmland, including Williamson Act contract land would be significant and unavoidable (City of Manteca 2022a).

There are no parcels designated as forest land and the General Plan Update does not propose uses that would convert existing forest land to non-forest use. Therefore, the General Update EIR determined there would be no impact regarding the loss of forest land or conversion of forest land to non-forest use (City of Manteca 2022a).

3.2.3 Project-Specific Impact Analysis

The following analysis is based on a review of documents pertaining to the Project site, including the General Plan Update, General Plan Update EIR, and the DOC Important Farmland Map. Additionally, the following analysis is based on analysis contained within the Agricultural Conversion Study and Land Evaluation and Site Assessment (LESA) Modeling prepared for the Project (Appendix A).

The LESA Model was developed to provide a lead agency with an optional methodology to ensure that potentially significant environmental effects of agricultural land conversions are quantitatively and consistently considered in the environmental review process (PRC Section 21095), including during CEQA reviews. As a lead agency, the City may depend on the LESA Model to evaluate the significance of agricultural land conversions.

The LESA Model evaluates and measures a project site's size, soil resource quality, water resource availability, surrounding agricultural lands, and surrounding protected resource lands. These factors are

then rated, weighted, and combined, resulting in a single numeric score. This score becomes the basis for determining the significance of a project's potential impacts on agricultural resources.

Using the LESA Model, a project would result in a significant impact on agricultural resources if the project meets the threshold criteria provided in Table 3.2-1. The criteria include a Land Evaluation (LE) scoring threshold and a Site Assessment (SA) scoring threshold. A single LESA score is generated for a project after all the individual LE and SA factors have been scored and weighted. Scores are based on a scale of a maximum of 100 points. Table 3.2-1 provides the ratings that determine whether a project would result in a significant impact on agricultural resources.

Table 3.2-1: California LESA Model Scoring Thresholds

Total LESA Score	Scoring Decision
0 to 39 points	Not considered significant
40 to 59 points	Considered significant only if LE and SA subscores are each greater than or equal to 20 points
60 to 79 points	Considered significant unless either LE or SA subscores is less than 20 points
80 to 100 points	Considered significant

Source: DOC 1997

The LESA Modeling worksheets prepared to evaluate the Project's potential impacts are provided in Appendix A.

Impact AG-1	**Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?**

Impact Analysis
The Project involves the development of 818 residential units on a vacant site that contains 44.34 acres of Farmland of Statewide Importance and 17.21 acres of Farmland of Local Importance. Based on review of aerial imagery, the Project site is within a highly urbanized area of the City and has not been used as productive agricultural land since early 2020.

The Agricultural Conversion Study (Appendix A) prepared for the Project utilized the LESA Model to determine the Project's potential impacts to the conversion of Important Farmland. The California LESA Model is designed to assess the significance of a proposed project's conversion of agricultural land. Loss of agricultural land has typically involved conversion to permanent urban uses, and the LESA Model has generally been used to evaluate that type of potential impact. The Project would affect the agricultural land on the Project site for the duration of the life of the Project. The LESA Modeling conducted for the Project determined that the Project site has a total LESA score of 58.62 (Stantec 2023). As outlined in Table 3.2-2, for a total LESA score between 40 and 59 points, the Project would result in a significant impact only if LE and SA subscores are each greater than or equal to 20 points. As identified in the LESA Modeling worksheets prepared for the Project (Appendix A) and **Error! Reference source not found.** below, the LE and SA subscores for the Project are each greater than 20 points. Therefore, due to the long-term conversion of Important Farmland and based on the LESA score of 58.62 with the LE and SA

subscores both over 20 points, the Project would have a potentially significant impact on agricultural resources.

Table 3.2-2: Final LESA Score

	Factor Scores	Factor Weight	Weighted Factor Scores
LE Factors			
Land Capability Classification	60	0.25	15
Storie Index	65.49	0.25	16.37
LE Subscore		*0.50*	*29.43*
SA Factors			
Project Size	70	0.15	10.50
Water Resource Availability	85	0.15	12.75
Surrounding Agricultural Land	0	0.15	0
Surrounding Protected Resources Land	80	0.05	4
SA Subscore		*0.50*	*27.25*
		Final LESA Score	**58.62**

Source: Stantec 2023, Appendix A

The Project would convert a total of 44.34 acres of Farmland of Statewide Importance and 17.21 acres of Farmland of Local Importance to non-agricultural use. However, the proposed land use is consistent with the City's overall planning vision, as identified in the General Plan Update, which assumes the site would be developed with a mix of residential uses.

The General Plan Update and General Plan Update EIR anticipated development of the Project site as part of the overall evaluation of buildout of the City. The General Plan Update EIR also addressed the conversion and loss of agricultural land that would result from buildout of the General Plan Update, providing a discussion of the General Plan policies and the City's Agricultural Mitigation Fee Program intended to reduce impacts on Important Farmland. While the City's Agricultural Mitigation Fee Program and the policies and actions from the General Plan Update would minimize impacts on agricultural lands, the General Plan Update EIR determined impacts would not be reduced to a less than significant level as agricultural land would still be permanently converted to urban uses. Therefore, the General Plan Update EIR determined impacts related to the conversion of Important Farmland would be significant and unavoidable. The City certified the General Plan EIR, adopted Statement of Overriding Considerations and Findings of Fact, and adopted the General Plan Update on July 18, 2023. The proposed Project is consistent with the General Plan Update policies related to this topic, and within the scope of the development program evaluated under the General Plan Update EIR. Therefore, the proposed Project would not result in a greater impact on Important Farmland than what has already been considered in the City's certified General Plan Update EIR.

Additionally, the conversion of the Project site to residential uses would be beneficial to the City as it would convert unproductive, vacant land located within the City to urbanized uses as recommended by General Plan Update Policy RC-7.2. The Project would also provide public and private open space areas throughout the site, including two community gardens and orchard planting areas within each multi-family component to encourage onsite urban agricultural activities as recommended by General Plan Update Policy RC-7.15. The two community gardens would total approximately 5,500 square feet and consist of

individual garden containers with a small support structure to store tools. The orchard planting areas would total approximately 32,000 square feet and would be planted with a mixed variety of trees that produce fruit, including but not limited to, lime and lemon trees. The incorporation of community gardens and orchard planting areas would maintain approximately 37,500 square feet of lands designated Farmland of Statewide Importance.

The Project would also be required to implement Mitigation Measure AG-1 and pay the applicable mitigation fees per the City's Agricultural Mitigation Fee Program (Chapter 13.42 of the Manteca Municipal Code) to reduce impacts from the conversion of Important Farmland to non-agricultural uses. The Agricultural Mitigation Fee Program authorizes the collection of development impact fees to offset the costs associated with the loss of productive agricultural lands converted for urban uses within the City. The mitigation fee is established on a per-acre basis in Title VI of the City's Development Fee Schedule and is required to be paid prior to the issuance of any building permits. The Applicant would pay the Agricultural Mitigation Fee as required by Mitigation Measure AG-1. The fees may be used as fair share compensation for farmland conservation easements, or farmland deed restrictions that conserve existing agricultural land. The fees collected by the City under the Agricultural Mitigation Fee Program are distributed to the Central Valley Farmland Trust. The Central Valley Farmland Trust then uses the fees to facilitate the placement of agricultural conservation easements to fulfill farmland mitigation requirements in the Central Valley. Therefore, with compliance with the General Plan Update policies and actions and the payment of the City's Agricultural Mitigation Fee required by Mitigation Measure AG-1, impacts on Important Farmland would be less than significant.

Level of Significance Before Mitigation
Potentially Significant Impact.

Mitigation Measures

MM AG-1: **Payment of Agricultural Mitigation Fee.** The Applicant shall participate in the City's Agricultural Mitigation Fee Program by paying the established fee for the loss of Important Farmland. The mitigation fee is established on a per-acre basis in Title VI of the City's Development Fee Schedule and is required to be paid prior to the issuance of any building permits. Fees paid toward the City's program shall be used to fund conservation easements on comparable or better agricultural lands to provide compensatory mitigation.

Level of Significance After Mitigation
Less Than Significant Impact with Mitigation.

Impact AG-2 Conflict with existing zoning for agricultural use or a Williamson Act contract?

Impact Analysis
The Project site is vacant and does not contain agricultural uses or lands contracted under the Williamson Act (City of Manteca 2022a). The Project site is currently zoned CMU, which does not permit agricultural uses and is intended to accommodate a variety of uses including high-density residential, employment centers, retail commercial, and professional offices. The Project is requesting to rezone the northwestern portion of the Project site to R-3 for the multi-family and two-family homes, and the northeastern and southern portions of the Project site to R-1 for the single-family uses. Neither the R-3 nor R-1 zoning districts permit agricultural uses. The Project would develop the site with 818 residential units consisting

of 672 multi-family for-rent apartments, 48 for-sale two-family units, and 98 single-family for-sale homes, consistent with the R-3 and R-1 zoning districts. Therefore, development of the Project would not conflict with existing zoning for agricultural use or with a Williamson Act contract, and there would be no impact.

Level of Significance Before Mitigation
No Impact.

Mitigation Measures
No mitigation is necessary.

Level of Significance After Mitigation
No Impact.

Impact AG-3	**Conflict with existing zoning for, or cause rezoning of, forestland (as defined in Public Resources Code section 12220[g]), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104[g])?**
AND	
Impact AG-4	**Result in the loss of forestland or conversion of forestland to non-forest use?**

Impact Analysis
As discussed, the Project site is vacant and does not contain forestland (as defined in PRC Section 12220[g]), or timberland (as defined by PRC Section 4526). Furthermore, the project site is not zoned Timberland Production (as defined by Government Code section 51104[g]). The Project is requesting to rezone the northwestern portion of the Project site to R-3 for the multi-family and two-family homes, and the northeastern and southern portions of the Project site to R-1 for the single-family uses. The R-3 and R-1 zoning districts do not allow forestland or timberland production. The Project would develop the site with 818 residential units consisting of 672 multi-family for-rent apartments, 48 for-sale two-family units, and 98 single-family for-sale homes. As such, the Project would not convert forestland or timberland to a non-agricultural use and no impact would occur.

Level of Significance Before Mitigation
No Impact.

Mitigation Measures
No mitigation is necessary.

Level of Significance After Mitigation
No Impact.

Impact AG-5	**Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forestland to non-forest use?**

Impact Analysis
The Project site is within an urbanized portion of the City that is mostly built out with residential and highway commercial uses. The Project site does not contain forest land, and there is no forest land in the vicinity of the Project site. The Project would convert the land to a non-farmland use with a variety of residential uses as evaluated in the General Plan Update. The Project does not involve any other changes in the existing environment not disclosed under the previous responses which, due to their location or nature, could result in the conversion of farmland, to non-agricultural use, or the conversion of forest land to non-forest use. Therefore, the Project would result in a less than significant impact.

Level of Significance Before Mitigation
Less Than Significant Impact.

Mitigation Measures
No mitigation is necessary.

Level of Significance After Mitigation
Less Than Significant Impact.

3.3 AIR QUALITY

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

3.3.1 Environmental Setting

The Project is located within the San Joaquin Valley Air Basin (SJVAB). The SJVAPCD regulates air quality in Fresno, Kern (western and central), Kings, Madera, Merced, San Joaquin, Stanislaus, and Tulare counties.

Air pollution in the SJVAB can be attributed to both human-related (anthropogenic) and natural (non-anthropogenic) activities that can produce emissions. Air pollution from significant anthropogenic activities in the SJVAB include a variety of industrial-based sources as well as on- and off-road mobile sources.

Activities that tend to increase mobile activity include increases in population, increases in general traffic activity (including automobiles, trucks, aircraft, and rail), urban sprawl (which will increase commuter driving distances), and general local land management practices as they pertain to modes of commuter transportation. These sources, couples with geographical and meteorological condition unique to the area, stimulate the formation of unhealthy air.

Climate and Topography

The following information is excerpted from the most recent version of the SJVAPCD Guide for Assessing and Mitigating Air Quality Impacts (GAMAQI) adopted in March 2015 (SJVAPCD 2015).

The SJVAB has an “inland Mediterranean” climate and is characterized by long, hot, dry summers and short, foggy winters. Sunlight can be a catalyst in the formation of some air pollutants (such as ozone); the Basin averages over 260 sunny days per year. The SJVAB is generally shaped like a bowl. It is open in the north and is surrounded by mountain ranges on all other sides. The Sierra Nevada mountains are along the eastern boundary (8,000 to 14,000 feet in elevation), the Coast Ranges are along the western

boundary (3,000 feet in elevation), and the Tehachapi Mountains are along the southern boundary (6,000 to 8,000 feet in elevation).

Dominant airflows provide the driving mechanism for transport and dispersion of air pollution. The mountains surrounding the SJVAB form natural horizontal barriers to the dispersion of air contaminants. The wind generally flows south-southeast through the valley, through the Tehachapi Pass and into the Southeast Desert Air Basin portion of Kern County. As the wind moves through the Basin, it mixes with the air pollution generated locally, generally transporting air pollutants from the north to the south in the summer and in a reverse flow in the winter.

Generally, the temperature of air decreases with height, creating a gradient from warmer air near the ground to cooler air at elevation. This gradient of cooler air over warm air is known as the environmental lapse rate. Inversions occur when warm air sits over cooler air, trapping the cooler air near the ground. These inversions trap pollutants from dispersing vertically and the mountains surrounding the San Joaquin Valley trap the pollutants from dispersing horizontally. Strong temperature inversions occur throughout the SJVAB in the summer, fall, and winter. Daytime temperature inversions occur at elevations of 2,000 to 2,500 feet above the San Joaquin Valley floor during the summer and at 500 to 1,000 feet during the winter. The result is a relatively high concentration of air pollution in the valley during inversion episodes. These inversions cause haziness, which in addition to moisture may include suspended dust, a variety of chemical aerosols emitted from vehicles, particulates from wood stoves, and other pollutants. In the winter, these conditions can lead to carbon monoxide “hotspots” along heavily traveled roads and at busy intersections. During summer’s longer daylight hours, stagnant air, high temperatures, and plentiful sunshine provide the conditions and energy for the photochemical reaction between reactive organic gases (ROG) and oxides of nitrogen (NO_X), which results in the formation of ozone.

Because of the prevailing daytime winds and time-delayed nature of ozone, concentrations are highest in the southern portion of the Basin. Summers are often periods of hazy visibility and occasionally unhealthful air, while winter air quality impacts tend to be localized and can consist of (but are not exclusive to) odors from agricultural operations; soot or smoke around residential, agricultural, and hazard-reduction wood burning; or dust near mineral resource recovery operations.

Air Pollutants of Concern

Criteria air pollutants are defined as pollutants for which the federal and state governments have established ambient air quality standards for outdoor concentrations. The federal and state standards have been set at levels above which concentrations could be harmful to human health and welfare. These standards are designed to protect the most sensitive persons such as children, pregnant women, and the elderly, from illness or discomfort. Criteria air pollutants include ozone (O_3), nitrogen dioxide (NO_2), carbon monoxide (CO), sulfur dioxide (SO_2), particulate matter 2.5 microns or less in diameter ($PM_{2.5}$), particulate matter ten microns or less in diameter (PM_{10}), and lead (Pb). Note that ROGs, which are also known as reactive organic compounds (ROCs) or volatile organic compounds (VOCs), and nitrogen oxide (NOx) are not classified as criteria pollutants. However, ROGs and NOx are widely emitted from land development projects and participate in photochemical reactions in the atmosphere to form O_3; therefore, NOx and ROGs are relevant to the Project and are of concern in the air basin and are listed below along with the criteria pollutants.

- **Ozone:** O_3 is a gas that is formed when NOx and ROGs, both byproducts of internal combustion engine exhaust and other sources, undergo slow photochemical reactions in the presence of sunlight. Ozone concentrations are generally highest during the summer months when the combination of direct sunlight, light wind, and warm temperature conditions create conditions favorable to the formation of this pollutant.

- **Reactive Organic Gases:** ROGs are compounds composed primarily of atoms of hydrogen and carbon. Internal combustion associated with motor vehicle usage is the major source of these hydrocarbons. Adverse effects on human health are not caused directly by ROGs, but rather by reactions of ROGs to form secondary air pollutants, including ozone.

- **Nitrogen Dioxide and Nitrogen Oxides:** Fuel combustion produces nitrogen which combines with oxygen to produce nitric oxide (NO). Further oxidation of NO results in the formation of NO_2, which is a criteria pollutant. NO_2 is a reddish-brown, highly reactive gas which acts as an acute irritant and, in equal concentrations, is more injurious than NO. NO and NO_2 are referred to together as oxides of nitrogen. As noted above, NO_x is involved in photochemical reactions that produce ozone.

- **Carbon Monoxide:** CO is a colorless, odorless gas produced by the incomplete combustion of fuels. CO concentrations tend to be the highest during winter mornings, with little to no wind, when surface-based inversions trap the pollutant at ground levels. Because CO is emitted directly from internal combustion engines and motor vehicles operating at slow speeds, the highest ambient CO concentrations are generally found near congested transportation corridors and intersections.

- **Sulfur dioxide:** SO_2 is a colorless, extremely irritating gas or liquid. It enters the atmosphere as a pollutant mainly as a result of burning high-sulfur-content fuel oils and coal and from chemical processes occurring at chemical plants and refineries. When sulfur dioxide oxidizes in the atmosphere, it forms sulfates (SO_4).

- **Respirable Particulate Matter:** PM_{10} consists of extremely small, suspended particles or droplets 10 microns or smaller in diameter. Some sources of PM_{10}, like pollen and windstorms, are naturally occurring. However, in populated areas, most PM_{10} is caused by road dust, diesel soot, and combustion products, abrasion of tires and brakes, and construction activities.

- **Fine Particulate Matter:** $PM_{2.5}$ refers to particulate matter that is 2.5 microns or smaller in size. The sources of $PM_{2.5}$ include fuel combustion from automobiles, power plants, wood burning, industrial processes, and diesel-powered vehicles such as buses and trucks. These fine particles are also formed in the atmosphere when gases such as sulfur dioxide, NO_X, and VOCs are transformed in the air by chemical reactions.

- **Lead:** Pb occurs in the atmosphere as particulate matter. The combustion of leaded gasoline is the primary source of airborne lead in the Basin. The use of leaded gasoline is no longer permitted for on-road motor vehicles, so most such combustion emissions are associated with off-road vehicles such as racecars that use leaded gasoline. Other sources of Pb include the manufacturing and recycling of batteries, paint, ink, ceramics, ammunition, and secondary lead smelters.

Ambient Air Quality

Each year, SJVAPCD summarizes data collected from the SJVAB air quality monitoring stations. The nearest air quality monitoring stations to the Project is the Tracy-Airport Monitoring Station located at 5749 S. Tracy Boulevard. Table 3.31 includes a summary of the air quality monitoring data at the Tracy-Airport Monitoring Station for the years 2021 through 2023. The Tracy-Airport Monitoring Station monitors ambient ozone, $PM_{2.5}$, PM_{10}, and NOx.

Table 3.3-1: Tracy-Airport Monitoring Station

Air Pollutant	Averaging Time	Item	2021	2022	2023
Ozone	1 Hour	Max 1 Hour (ppm)	0.089	0.082	0.075
		Days > State Standard (0.09 ppm)	0	0	0
	8 Hour	Max 8 Hour (ppm)	0.077	0.074	0.063
		Days > State Standard (0.070 ppm)	3	1	0
		Days > National Standard (0.070 ppm)	3	1	0
		Days > National Standard (0.075 ppm)	2	0	0
$PM_{2.5}$	24-Hour	Max 24 Hours (µg /m^3)	*	*	*
		Measured Days > 24 Hour Standard	*	*	*
		Annual Average	*	*	*
PM_{10}	24-Hour	Max 24 Hours (µg /m^3)	175.7	75.3	72.5
		Measured Days > 24 Hour Standard	1	0	0
		Annual Average	23.8	22.4	19.6
Nitrogen Dioxide	1-Hour	Max 1 Hour (ppb)	35.6	34.7	27.3
		Annual Average	4	4	*
		Days > State Standard (180 ppb)	0	0	0
		Days > National Standard (100 ppb)	0	0	0

Source: CARB 2022
µg/m^3 = micrograms per liter
$PM_{2.5}$ = particulate matter less than 2.5 microns in aerodynamic diameter
PM_{10} = particulate matter between 2.5 and 10 microns in aerodynamic diameter
ppb = parts per billion
ppm = parts per million
* = insufficient data available to determine the value

Toxic Air Contaminants

In addition to the criteria pollutants discussed above, toxic air contaminants (TACs) are another group of pollutants of concern. TACs are considered either carcinogenic or noncarcinogenic based on the nature of the health effects associated with exposure to the pollutant. For regulatory purposes, carcinogenic TACs are assumed to have no safe threshold and health impacts are assumed to occur at any level. Cancer risks are expressed as excess cancer cases per one million. Noncarcinogenic TACs differ in that

there is generally assumed to be a safe level of exposure below which no negative health impact is believed to occur. These levels are determined on a pollutant-by-pollutant basis.

The California Air Resources Board (CARB) has designated 244 compounds as TACs. CARB has implemented control measures for a number of compounds that pose high risks and show potential for effective control. The majority of the estimated health risks from TACs can be attributed to relatively few compounds. Diesel particulate matter (DPM) differs from other TACs in that it is not a single substance but rather a complex mixture of hundreds of substances, including 40 cancer-causing substances. Diesel exhaust is a complex mixture of particulates and gases produces when an engine burns diesel fuel. DPM is a concern because it can cause lung cancer, cardiopulmonary death, increased hospitalizations (cardiovascular and respiratory), and increased emergency room visits for asthma; many compounds found in diesel exhaust are carcinogenic.

Sensitive Receptors

Some land uses are considered more sensitive to air pollution than others due to the types of population groups or activities involved. Heightened sensitivity may be caused by health problems, proximity to the emissions source, or duration of exposure to air pollutants. 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, childcare centers, playgrounds, retirement homes, convalescent homes, hospitals, and medical clinics.

The nearest sensitive receptors are immediately south and east of the Project site. In addition, new onsite residents at the Project site would be considered sensitive receptors.

Existing Sources of Toxic Emissions

The Project is located within 300 feet of an existing gas station and approximately 500 feet south of Highway 120. The primary TAC of concern from Highway 120 is DPM, primarily from diesel trucks traveling along the highway. The existing gas station would generate benzene emissions from gas fueling, storage, and spillage.

Valley Fever

Valley Fever is an infection caused by a fungus that lives in the soil. About 10,000 U.S. cases are reported each year, mostly from Arizona and California. Valley Fever can be misdiagnosed because its symptoms are like those of other illnesses.

The fungus that causes Valley Fever, Coccidioides, is found in the southwestern United States, parts of Mexico and Central America, and parts of South America. The fungus grows naturally and is endemic in many areas along the southwestern region of Tulare County. People can get this infection by breathing in fungal spores from the air, especially when the wind blows the soil with the fungal spores into the air, or the dirt is moved by human activity. About 40 percent of the people who come into contact with the fungal spores will develop symptoms that may require medical treatment and the symptoms will not go away on their own. Some people may develop a more severe infection, especially those with compromised immune systems (Centers for Disease Control and Prevention [CDC] 2020).

3.3.2 Previous Environmental Analysis

City of Manteca General Plan Update EIR

The General Plan Update EIR determined implementation of the General Plan Update would result in population growth, and an increase in vehicle miles traveled (VMT) that exceed the growth projections assumed in the applicable air quality plans. Therefore, the General Plan Update has the potential to conflict with or obstruct implementation of an applicable air quality plan. Mitigation measures that would limit population or VMT growth to the levels assumed in the applicable air quality plans would conflict with the policies and actions in the General Plan Update. Additionally, the total emissions levels associated with buildout of the General Plan Update would increase, which may indirectly hinder the SJVAPCDs efforts to reduce total emissions of criteria pollutants. Therefore, the General Plan Update EIR determined the General Plan Update would result in a significant and unavoidable impact related to consistency with an air quality plan and the generation of criteria pollutants (City of Manteca 2022a).

Future development would be required to comply with all applicable SJVAPCD rules and regulations, and the General Plan Update policies and actions. The General Plan Update, the policies therein coupled with the routine implementation of the project review necessary for zoning entitlements would ensure compliance with all applicable polices and implementing actions that address exposure to TACs and odors. Therefore, the General Plan Update EIR determined impacts related to TACs and odors would be less than significant (City of Manteca 2022a).

3.3.3 Project-Specific Impact Analysis

Thresholds of Significance

While the final determination of whether a project is significant is within the purview of the Lead Agency pursuant to Section 15064(b) of the CEQA Guidelines, the SJVAPCD recommends that its quantitative air pollution thresholds (shown in Table 3.3-2) be used to determine the significance of project emissions. If the Lead Agency finds that the project has the potential to exceed these air pollution thresholds, the project should be considered to have significant air quality impacts.

In developing thresholds of significance for air pollutants, SJVAPCD considered the emission levels for which a project's individual emissions would be cumulatively considerable. Therefore, if a project's emissions exceed thresholds of significance, then the project would be expected to result in a cumulatively considered net increase of any criteria air pollutant. If a project is below significance thresholds, it cannot be considered cumulatively considerable (SJVAPCD 2015). Table 3.3-2 summarizes SJVAPCD thresholds used for this analysis.

Table 3.3-2: SJVAPCD Air Quality CEQA Thresholds of Significance

Pollutant	Significance Threshold	
	Construction Emissions (tons/year)	Operational Emissions (tons/year)
CO	100	100
NO_X	10	10
ROGs	10	10
SO_X	27	27
PM_{10}	15	15
$PM_{2.5}$	15	15

Source: SJVAPCD 2015

Impact AIR-1 Conflict with or obstruct implementation of the applicable air quality plan?

Impact Analysis

The CEQA Guidelines indicate that a significant impact would occur if the Project would conflict with or obstruct implementation of the applicable air quality plan. The GAMAQI does not provide specific guidance on analyzing conformity with the Air Quality Plan (AQP). Therefore, the following criteria is used for determining the Project's consistency with the AQP.

- Will the Project result in an increase in the frequency or severity of existing air quality violations or cause or contribute to new violations, or delay timely attainment of air quality standards or the interim emissions reductions specified in the AQPs? This measure is determined by comparison to the regional and localized thresholds identified by the District or Regional and Local Air Pollutants.
- Will the Project conform to the assumptions in the AQPs?
- Will the Project comply with applicable control measures in the AQPs?

The use of criteria listed above is a standard approach for CEQA analysis of projects in the SJVAPCD's jurisdictions, as well as within other air districts, for the following reasons:

- Significant contribution to existing or new exceedances of the air quality standards would be inconsistent with the goal of attaining the air quality standards.
- AQP emissions inventories and attainment modeling are based on growth assumptions for the area within the SJVAPCD's jurisdiction.
- AQPs rely on a set or air district-initiated control measures as well as implementation of federal and state measures to reduce emissions within their jurisdictions, with the goal of attaining the air quality standards.

AQPs are plans for reaching attainment of air quality standards. The assumptions, inputs, and control measures are analyzed to determine if the SJVAB can reach attainment for the ambient air quality standards. To show attainment of the standards, the SJVAPCD analyzes the growth projections in the

valley, contributing factors in air pollutant emissions and formations, and existing and adopted emissions controls. The SJVAPCD then formulates a control strategy to reach attainment that includes both State and SJVAPCD regulations and other local programs and measures. The applicable AQPs include the 2023 Maintenance Plan and Redesignation Request for the Revoked 1-Hour Ozone Standard, 2022 Plan for the 2015 8-Hour Ozone Standard, and 2016 8-Hour Ozone Plan which contains measures to achieve reductions in emissions of ozone precursors and sets plans toward attainment of ambient ozone standards by 2023. It also includes the 2024, 2018, 2016, 2015, 2012, and 2008 $PM_{2.5}$ Plans to address multiple $PM_{2.5}$ air quality standards and attainment deadlines.

Contribution to Air Quality Violations

A measure of determining if the Project is consistent with the AQPs is if the Project would not result in an increase in the frequency or severity of existing air quality violations, cause or contribute to new violations, or delay timely attainment of air quality standards or the interim emission reductions specified in the AQPs. Because of the region's nonattainment status for ozone, $PM_{2.5}$, and PM_{10}, if Project-generated emissions of either the ozone precursor pollutants (ROG and NO_x), $PM_{10,}$ or $PM_{2.5}$ would exceed the SJVAPCD's significance thresholds, then the Project would be considered to conflict with the attainment plans.

As shown in Impact AIR-2, emissions of ROG, NOx, PM_{10}, and $PM_{2.5}$ from construction and operation of the Project would not exceed the SJVAPCD's significance thresholds. As shown in Impact AIR-3, the Project would not expose sensitive receptors to a substantial pollutant concentration. Therefore, the Project would not contribute to air quality violations.

Consistency with Assumptions in AQPs

The primary way of determining consistency with the AQP's assumptions is determining consistency with the applicable General Plan to ensure that the Project's population density and land use are consistent with the growth assumptions used in the AQPs for the SJVAB.

As required by California law, the City's General Plan contains a Land Use Element that details the types and quantities of land uses and regulates future growth. The San Joaquin Council of Governments (SJCOG) uses the growth projections and land use information in adopted general plans, among other sources to estimate future average daily trips and then VMT, which are then provided to the SJVAPCD to estimate future emissions in the AQPs. Existing and future pollutant emissions computed in the AQPs are based on land uses from area general plans. AQPs detail the control measures and emission reductions required for reaching attainment of the air standards based on these growth and emission estimates.

The applicable General Plan for the Project is the City of Manteca General Plan Update, which designates the Project site as CMU and MDR. The Project is requesting a General Plan Amendment to re-designate the northwestern portion of the Project site as HDR for the proposed multi-family and two-family homes, and the northeastern and southern portions of the Project site as LDR for the single-family uses. While the Project is requesting a General Plan Amendment, the Project would develop the site with a mix of housing typology uses comprising a high-density use, including multi-family, single-family, and two-family uses as evaluated in the General Plan Update and General Plan Update EIR. The Project's development of 818 new housing units would result in an increase of 1,943 residents, see Section 3.14, Population and Housing. The General Plan Update EIR identifies that the population of Manteca in 2020

was 84,800 residents and the Department of Finance (DOF) estimates the current population of Manteca as of January 2023 to be 88,803 residents (City of Manteca 2022a, DOF 2023). The addition of 1,943 new residents from Project buildout would result in a 2.2 percent increase from the current 2023 population estimates. The City's population is anticipated to increase to 121,168 residents from buildout of the General Plan Update and the estimated Project residents would represent 1.6 percent of the anticipated City population at buildout of the General Plan Update. The General Plan Update estimates full buildout would generate 27,448 jobs. The Project would generate up to 11 staff members to support the two apartment complexes, which would represent 0.04 percent of the anticipated number of jobs under the General Plan Update.

The new residents and employees resulting from the Project would result in a minimal increase in the City's future growth forecasts and the projected increase would be consistent with the City's population growth projections anticipated by the General Plan Update. The Project would not cause an impact greater than what has already been considered in the City's certified General Plan Update EIR. Therefore, the Project would be consistent with the modeling used to prepare the AQPs. The impact would be less than significant.

Control Measures

The AQP contains several control measures, which are enforceable requirements through the adoption of rules and regulations. SJVAPCD rules and regulations applicable to the Project include, but are not limited to, the following: Rule 4102 (Nuisance), Rule 4601 (Architectural Coatings), Rule 4641 (Cutback, Slow Cure, and Emulsified Asphalt, Paving and Maintenance Operations), and Regulation VIII (Fugitive PM_{10} Prohibitions). The Project would comply with all applicable SJVAPCD rules and regulations. Therefore, the Project complies with this criterion and would not conflict with or obstruct implementation of the applicable AQP.

Conclusion

The Project would not conflict with or obstruct implementation of the applicable AQPs and the impact would be less than significant.

Level of Significance Before Mitigation
Less Than Significant Impact.

Mitigation Measures
No mitigation is necessary.

Level of Significance After Mitigation
Less Than Significant Impact.

Impact AIR-2	**Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or State ambient air quality standard?**

Impact Analysis
To result in a less than significant impact, the following criteria must be true:

1. **Regional analysis:** emissions of nonattainment pollutants must be below the SJVAPCD's regional significance thresholds. This is an approach recommended by the SJVAPCD in its GAMAQI.

2. **Summary of projections:** the project must be consistent with current AQPs, including control measures and regulations. This is an approach consistent with Section 15130(b) of the CEQA Guidelines.

3. **Cumulative health impacts:** the project must result in less than significant cumulative health effects from the nonattainment pollutants. This approach correlates the significance of the regional analysis with health effects, consistent with the court decision, *Sierra Club v. County of Fresno (2018)* 6 Cal. 5th 502.

Step 1: Regional Analysis

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

The primary pollutants of concern during Project construction and operation are ROG, NO_x, PM_{10}, and $PM_{2.5}$. The SJVAPCD GAMAQI adopted in 2015 contains thresholds for ROG and NO_x; SO_X, CO, PM_{10}, and $PM_{2.5}$, see Table 3.3-2, above.

Ozone is a secondary pollutant that can be formed miles away from the source of emissions through reactions of ROG and NO_x emissions in the presence of sunlight. Therefore, ROG and NO_x are termed ozone precursors. The SJVAB often exceeds the state and national ozone standards. Therefore, if the Project emits a substantial quantity of ozone precursors, the Project may contribute to an exceedance of the ozone standard. The SJVAB also exceeds air quality standards for PM_{10}, and $PM_{2.5}$; therefore, substantial Project emissions may contribute to an exceedance for these pollutants. The SJVAPCD's annual emission significance thresholds used for the Project's construction and operational emissions are provided in Table 3.3-3.

Construction Emissions

Construction would include onsite construction, Phase A, Phase B, and offsite construction, see Section 2.3, Project Construction. Construction emissions associated with the Project are shown in Table 3.3-3. As shown in Table 3.3-3, the emissions are below the significance thresholds and, therefore, are less than significant on a Project basis. Moreover, as discussed above, the Project would utilize Tier 4

construction equipment; therefore, the emission reductions from that construction feature are included in the modeling.

Table 3.3-3: Construction Emissions

Emissions Source	Emissions (Tons/Year)[1]					
	ROG	NO_X	CO	SO_X	PM_{10}	$PM_{2.5}$
Onsite Project Construction						
2025	0.05	0.18	0.91	0.00	0.23	0.05
Phase A – Duplex Construction and Single-Family Construction						
2025	0.87	2.18	4.05	0.01	1.36	0.61
2026	0.14	1.50	3.08	<0.005	0.26	0.07
2027	0.11	1.18	2.39	<0.005	0.20	0.06
Phase B – Multi-Family Construction						
2025	0.09	2.10	3.89	0.01	1.50	0.69
2026	0.21	2.13	4.12	0.01	0.59	0.19
2027	0.19	1.86	3.59	0.01	0.45	0.13
2028	0.09	0.99	1.86	<0.005	0.24	0.07
Offsite Roadway Improvements						
2027[2]	0.17	0.52	3.51	0.01	1.60	0.35
Total Construction Emissions by Year						
2025	1.01	4.46	8.85	0.02	3.09	1.35
2026	0.35	3.63	7.20	0.01	0.85	0.26
2027	0.47	3.56	9.49	0.02	2.25	0.54
2028	0.09	0.99	1.86	<0.005	0.24	0.07
Significance Thresholds	**10**	**10**	**100**	**27**	**15**	**15**
Any Year Exceed Significance Thresholds?	***No***	***No***	***No***	***No***	***No***	***No***

Notes:
Source of Emissions: CalEEMod Output (Appendix B).
Source of Thresholds: SJVAPCD 2015.
[1] The Project would use off-road diesel-powered construction equipment that meets Tier 4 off-road emission standards during all Project phases.
[2] Offsite roadway improvements would extend into 2028, conservatively assumed all emissions would take place in 2027.

Operations

Operational emissions occur over the lifetime of the Project and from two main sources: areas sources and motor vehicles. The SJVAPCD considers construction and operations emissions separately when making a significance determination. As shown in Table 3.3-4, the operational emissions are below the significance thresholds and, therefore, are less than significant on a Project basis.

Table 3.3-4: Operational Emissions

Source	Emissions (tons/year)					
	ROG	NO_X	CO	SO_X	PM_{10}	$PM_{2.5}$
Phase A Operation						
Area	1.26	0.08	2.27	<0.005	0.20	0.19
Energy	0.00	0.00	0.00	0.00	0.00	0.00
Mobile	0.93	0.99	7.28	0.02	1.62	0.42
Subtotal	*2.20*	*1.07*	*9.55*	*0.02*	*1.82*	*1.47*
Phase B Operation						
Area	3.84	0.37	10.40	0.02	0.91	0.88
Energy	0.00	0.00	0.00	0.00	0.00	0.00
Mobile	2.74	2.72	20.80	0.05	5.06	1.32
Subtotal	*6.58*	*3.09*	*31.20*	*0.07*	*5.97*	*2.19*
Total Operational Emissions						
Total	8.78	4.16	40.75	0.09	7.79	3.66
Significance Thresholds	**10**	**10**	**100**	**27**	**15**	**15**
Exceed Significance Thresholds?	***No***	***No***	***No***	***No***	***No***	***No***

Notes:

Emissions were quantified using CalEEMod, version 2022.1.1.22 based on project details and estimated operating year for the proposed project. Totals may not sum exactly due to rounding.

Source: CalEEMod Output (Attachment B).

Overlapping Construction and Operation

Additionally, Phase A operation may begin as Phase B is under construction, resulting in overlapping emissions. Based on the construction schedule, Phase B may be in construction in 2028 while Phase A is in operation. As such, Phase B construction emissions from 2028 were used to estimate the overlapping emissions. As shown in Table 3.3-5, the results of Phase A operation and Phase B construction emissions combined would continue to fall below significance thresholds and, therefore, are less than significant on a Project basis.

Table 3.3-5: Overlapping Construction and Operational Emissions

Source	Emissions (tons/year)					
	ROG	NO_X	CO	SO_X	PM_{10}	$PM_{2.5}$
Phase A Operation						
Area	1.26	0.08	2.27	<0.005	0.20	0.19
Energy	0.00	0.00	0.00	0.00	0.00	0.00
Mobile	0.93	0.99	7.28	0.02	1.62	0.42
Total Phase A Operational	*2.20*	*1.07*	*9.55*	*0.02*	*1.82*	*1.47*
Phase B Construction						
2028	0.09	0.99	1.86	<0.005	0.24	0.07

Source	Emissions (tons/year)					
	ROG	**NO_X**	**CO**	**SO_X**	**PM_{10}**	**$PM_{2.5}$**
Total Phase B Construction (2028)	0.09	0.99	1.86	<0.005	0.24	0.07
Total Emissions (Phase A Operation and Phase B Construction)						
Total	2.29	2.06	11.41	0.025	2.06	1.54
Significance Thresholds	**10**	**10**	**100**	**27**	**15**	**15**
Exceed Significance Thresholds?	***No***	***No***	***No***	***No***	***No***	***No***

Notes:

Emissions were quantified using CalEEMod, version 2022.1.1.22 based on project details and estimated operating year for the proposed project. Totals may not sum exactly due to rounding.

Source: CalEEMod Output (Attachment B).

If an area is in nonattainment for a criteria pollutant, then the background concentration of that pollutant has historically exceeded the ambient air quality standard. It follows that if a project exceeds the regional threshold for that nonattainment pollutant, then it would result in a cumulatively considerable net increase of that pollutant and result in a significant cumulative impact (SJVAPCD 2015).

The SJVAB is in nonattainment for PM_{10}, $PM_{2.5}$, and ozone. Therefore, if the Project exceeds the regional thresholds for PM_{10}, or $PM_{2.5}$, then it contributes to a cumulatively considerable impact for those pollutants. If the Project exceeds the regional threshold for NO_X or ROG, then it follows that the Project would contribute to a cumulatively considerable impact for ozone.

The criteria pollutant emissions analysis, as shown above, assessed whether the Project would exceed the SJVAPCD's thresholds of significance. As shown in Table 3.3-3 and Table 3.3-4, criteria pollutant emissions would not exceed any threshold of significance during Project construction or operation. Therefore, the combination of unmitigated Project emissions with the criteria pollutants from other sources within the SJVAB would not cumulatively contribute to a significant impact according to this criterion.

Step 2: Plan Approach

Section 15130(b) of the CEQA Guidelines states the following:

> *The following elements are necessary to provide an adequate discussion of significant cumulative impacts: 1) Either: (A) A list of past, present, and probable future projects producing related or cumulative impacts, including, if necessary, those projects outside the control of the agency, or (B) 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.*

In accordance with CEQA Guidelines 15130(b), this analysis of cumulative impacts is based on a summary of projections analysis. The SJVAB is in nonattainment for ozone and particulate matter (PM_{10} and $PM_{2.5}$), which means that concentrations of these pollutants currently exceed the applicable ambient air quality standards.

Cumulative impacts may be analyzed using other plans that evaluate relevant cumulative effects. The geographic scope for cumulative criteria pollution from air quality impacts is the SJVAB, because that is

the area in which the air pollutants generated by the sources within the SJVAB circulate and are often trapped. The SJVAPCD is required to prepare and maintain air quality attainment plans and a SIP to document the strategies and measures to be undertaken to reach attainment of ambient air quality standards. While the SJVAPCD does not have direct authority over land use decisions, it is recognized that changes in land use and circulation planning would help the SJVAB achieve clean air mandates. The SJVAPCD evaluated emissions from land uses and transportation in the entire SJVAB when it developed its attainment plans.

In accordance with CEQA Guidelines Section 15064, subdivision (h)(3), a Lead Agency may determine that a project's incremental contribution to a cumulative effect is not cumulatively considerable if the Project complies with the requirements in a previously approved plan or mitigation program.

As discussed in Impact AIR-1, the Project is consistent with all applicable control measures in the air quality attainment plans. The Project would be required to comply with any SJVAPCD rules and regulations that may pertain to implementation of the AQPs. Therefore, impacts would be less than significant with regard to compliance with control measures and regulations.

Step 3: Cumulative Health Impacts

The SJVAB is in nonattainment for ozone, PM_{10}, and $PM_{2.5}$, which means that the background levels of those pollutants are at times higher than the ambient air quality standards. The air quality standards were set to protect public health, including the health of sensitive individuals (such as children, the elderly, and the infirm). Therefore, when the concentration of those pollutants exceeds the standard, it is likely that some sensitive individuals in the population would experience health effects.

Adverse health effects induced by ozone includes short-term effects such as coughing, difficulty breathing, and sore throat as well as long-term effects including inflamed or damaged airways, aggravated lung diseases like asthma or bronchitis, and increased frequency of asthma attacks. O_3 is created through chemical reactions between NOx, VOCs, and oxygen (USEPA 2021). Therefore, the health effects related to O_3 are the product of emissions generated by numerous sources throughout the region.

Exposure to particulate matter (PM_{10} and $PM_{2.5}$) can affect the lungs and heart and may cause irregular heartbeat, aggravated asthma, and decreased lung function (USEPA 2021). Direct sources of particulate matter include construction sites, unpaved roads, fields, and fires. Particulate matter is also formed indirectly as a result of complex reactions of chemicals such as SOx and NOx (USEPA 2021).

The SJVAPCD has acknowledged that while Health Risk Assessments (HRAs) for localized air toxic impacts are commonly prepared, the currently available modeling tools are not equipped to provide a meaningful analysis of the correlation between an individual development project's criteria air pollutant emissions and specific human health impacts (SJVAPCD 2015). The South Coast Air Quality Management District (SCAQMD) states that based on their own modeling in the SCAQMD's *2012 Air Quality Management Plan*, a reduction of 432 tons (864,000 pounds) per day of NOx and a reduction of 187 tons (374,000 pounds) per day of VOC would reduce O_3 levels at the highest monitored site by only nine parts per billion. As such, the SCAQMD concludes that it is not currently possible to accurately quantify O_3-related health impacts caused by NOx or VOC emissions from relatively small projects

(defined as projects with regional scope) due to photochemistry and regional model limitations (SCAQMD 2015).

The Project's construction and operational emissions, shown in Tables 3.3-3 and 3.3-4, indicates that the Project would not exceed the SJVAPCD's significance thresholds, and the Project is consistent with the applicable AQPs. Therefore, the Project's emissions would not have a measurable effect on human health and would not result in significant cumulative health impacts from nonattainment pollutants. The impact would be less than significant.

Conclusion

The Project would not result in a cumulatively considerable net increase of any criteria pollutant for which the region is non-attainment under an applicable federal or state ambient air quality standard. The impact would be less than significant.

Level of Significance Before Mitigation
Less Than Significant Impact.

Mitigation Measures
No mitigation is necessary.

Level of Significance After Mitigation
Less Than Significant Impact.

Impact AIR-3 Expose sensitive receptors to substantial pollutant concentrations?

Impact Analysis
This discussion addresses whether the Project would expose sensitive receptors to Naturally Occurring Asbestos (NOA), construction-generated fugitive dust (PM_{10}), ROG, NO_X, $PM_{2.5}$, Valley Fever, construction generated DPM, and operational health risks from the existing gas station. A sensitive receptor is a person in a population who is particularly susceptible to health effects due to exposure to an air contaminant. The following are land uses (sensitive sites) where sensitive receptors are typically located:

- Long-term health care facilities
- Rehabilitation centers
- Convalescent centers
- Hospitals
- Retirement homes
- Residences
- Schools, playgrounds, and childcare centers

The nearest sensitive receptors are immediately south and east of the Project site boundaries. Residential homes immediately east of the Project site lie approximately 600 feet from Highway 120 and approximately 0.5-mile from the existing gas station. Residential homes immediately south of the Project

site lie approximately 1,750 feet from Highway 120 and at least 825 feet from the existing gas station. In addition, new onsite residents at the Project site would be considered sensitive receptors. Two quantitative HRAs were prepared. The first HRA evaluates the risk to existing, offsite residences during Project construction and evaluates the risk posed to the offsite receptors from DPM generated as a result of Project construction. The second HRA evaluates the risk posed to new, onsite receptors during Project operation from existing TAC sources, including the nearby gas station and highway in order to evaluate the risk that new Project residents may incur. As two separate receptors are evaluated, two separate HRAs were prepared.

Localized Impacts

Emissions occurring at or near the Project have the potential to create a localized impact also referred to as an air pollutant hotspot. Localized emissions are considered significant if when combined with background emissions, they would result in exceedance of any health-based air quality standard. In locations that already exceed standards for these pollutants, significance is based on a significant impact level that represents the amount that is considered a cumulatively considerable contribution to an existing violation of an air quality standard. The pollutants of concern for localized impact in the SJVAB are NO_2 and CO.

The SJVAPCD has provided guidance for screening localized impacts in the GAMAQI that establishes a screening threshold of 100 pounds per day of any criteria pollutant. If a project exceeds 100 pounds per day of any criteria pollutant, then ambient air quality modeling would be necessary. If the Project does not exceed 100 pounds per day of any criteria pollutant, then it can be assumed that it would not cause a violation of an ambient air quality standard.

Construction: Localized Concentrations of PM_{10}, $PM_{2.5}$, CO, and NO_2

Local construction impacts would be short-term in nature lasting only during the duration of construction. Because of the short duration and limited amount of construction anticipated for the Project, application of best management practices through compliance with Regulation VIII Fugitive Dust Prohibitions to minimize construction emissions, and levels of emissions less than the SJVAPCD's emission significance thresholds, localized construction concentrations are considered less than significant. It should also be noted that the onsite construction emissions would be less than 100 pounds per day for each of the criteria pollutants, as shown in Table 3.3-6 below. To present a conservative estimate, onsite emissions for on-road construction vehicles were included in the localized analysis. It should be noted that the estimates below do not include reductions associated with Rule 9510 compliance, which would reduce NO_X and PM_{10} emissions. Furthermore, the Project would use Tier 4 construction equipment for the onsite construction. Table 3.3-6 includes the unmitigated, onsite air emissions.

Based on the SJVAPCD's guidance the construction emissions would not cause an ambient air quality standard violation. Impacts would be less than significant.

Table 3.3-6: Localized Concentrations of PM_{10}, $PM_{2.5}$, CO, and NOx for Construction

Year	Emissions (pounds per day)			
	NO_X	CO	PM_{10}	$PM_{2.5}$
Pre-construction Utilities				
2025				
Grubbing/Land Clearing	1.2	13.06	10.1	2.15
Grading/Excavation	15.86	58.16	10.68	2.51
Drainage/Utilities/Sub-Grade	3.38	33.2	10.2	2.25
2025 Pre-construction Utilities Maximum	*15.86*	*58.16*	*10.68*	*2.51*
Phase A – Duplex Construction and Single-Family Construction				
2025				
Site Preparation	14.7	28.3	19.8	10.2
Grading	19.4	35.3	9.4	3.84
Utilities	19.4	35.3	9.38	3.83
Building Construction	10.2	15.6	0.13	0.12
Paving	7.21	10.6	0.09	0.08
2025 Phase A Maximum	*19.4*	*35.3*	*9.4*	*3.84*
2026				
Building Construction	10.2	15.6	0.13	0.12
2026 Phase A Maximum	*10.2*	*15.6*	*0.13*	*0.12*
2027				
Building Construction	10.2	15.6	0.13	0.12
2027 Phase A Maximum	*10.2*	*15.6*	*0.13*	*0.12*
Phase B – Multi-Family Construction				
2025				
Site Preparation	14.7	28.3	19.8	10.2
Grading	19.4	35.3	9.39	3.84
Utilities	19.4	35.3	9.38	3.83
Building Construction	10.2	15.6	0.13	0.12
Paving	7.21	10.6	0.09	0.08
2025 Phase A Maximum	*19.4*	*35.3*	*9.38*	*3.84*
2026				
Utilities	19.4	35.3	9.38	3.83
Building Construction	10.2	15.6	0.13	0.12
Paving	7.21	1.6	0.09	0.08
2026 Phase A Maximum	*19.4*	*35.3*	*9.38*	*3.84*
2027				
Building Construction	10.2	15.6	0.13	0.12
2027 Phase A Maximum	*10.2*	*15.6*	*0.13*	*0.12*
2028				
Building Construction	10.2	15.6	0.13	0.12
2028 Phase A Maximum	*10.2*	*15.6*	*0.13*	*0.12*
Offsite Roadway Improvements (2027)				
Offsite Roadway Improvements	8.45	58.61	21.46	4.74
2026 Offsite Maximum	*8.45*	*58.61*	*21.46*	*4.74*
Combined Maximum Per Year				
2025 (Pre-construction Utilities)	15.86	58.16	10.68	2.51
2025 (Phase A and Phase B)	38.8	70.6	18.78	7.68
2026	27.85	93.91	30.84	8.58
2027	28.85	89.81	21.72	4.98
2028	10.2	15.6	0.13	0.12
Significance Thresholds	**100**	**100**	**100**	**100**
Any Year Exceed Significance Thresholds?	***No***	***No***	***No***	***No***

Year	Emissions (pounds per day)			
	NO_X	CO	PM_{10}	$PM_{2.5}$

Notes:

PM_{10} and $PM_{2.5}$ emissions are from the unmitigated output and as a result are more conservative as they do not reflect compliance with Regulation VIII—Fugitive PM_{10} Prohibitions. The table only accounts for onsite construction emissions.

Pre-construction utilities occurs prior to Phase A or Phase B construction and, as a result, the emissions would not overlap.

Source of Thresholds: SJVAPCD 2015

Operation: Localized Concentrations of PM_{10}, $PM_{2.5}$, CO, and NO_2

Localized impacts could occur in areas with a single large source of emissions such as a power plant or with multiple sources concentrated in a small area such as a distribution center. Since the Project is proposing to develop residential land uses, localized levels of PM_{10}, $PM_{2.5}$, CO, and NO_2 are not expected to exceed localized impacts.

ROG

During paving operations, ROG is emitted. The amount emitted is dependent on the amount of ROG (or VOC) in the paving materials. There are three types of asphalt that are typically used in paving: asphalt cements, cutback asphalts, and emulsified asphalts. However, SJVAPCD Rule 4641 prohibits the use of the following types of asphalt: rapid cure cutback asphalt; medium cure cutback asphalt; slow cure asphalt that contains more than one-half (0.5) percent of organic compounds that evaporate at 500 degrees Fahrenheit (°F) or lower; and emulsified asphalt containing organic compounds, in excess of 3 percent by volume, that evaporate at 500°F or lower. An exception to this is medium cure asphalt when the National Weather Service official forecast of the high temperature for the 24-hour period following application is below 50°F.

The acute (short-term) health effects from worker direct exposure to asphalt fumes include irritation of the eyes, nose, and throat. Other effects include respiratory tract symptoms and pulmonary function changes. The studies were based on occupational exposure of fumes. Sensitive receptors are not in the immediate vicinity of the fumes; therefore, they would not be subjected to concentrations high enough to evoke a negative response. In addition, the restrictions that are placed on asphalt in the San Joaquin Valley reduce ROG emissions from asphalt and exposure. The impact to sensitive receptors from ROG during construction is less than significant.

Naturally Occurring Asbestos

According to a map of areas where NOA in California are likely to occur (United States Geological Survey n.d.), there are no such areas in the Project area. Therefore, development of the Project is not anticipated to expose receptors to NOA. Impacts would be less than significant.

Fugitive Dust (PM_{10})

Although PM_{10} emissions would not exceed the thresholds of significance, there is potential for localized PM_{10} health impacts. The Project would comply with the SJVAPCD's Regulation VIII by incorporating Best Management Practices to reduce fugitive dust. Therefore, potential impacts related to fugitive dust would be less than significant.

Valley Fever

Valley Fever, or coccidioidomycosis, is an infection caused by inhalation of the spores of the fungus, *Coccidioides immitis* (*C. immitis*). The spores live in soil and can live for an extended time in harsh environmental conditions. Activities or conditions that increase the amount of fugitive dust contribute to greater exposure, and they include dust storms, grading, and recreational off-road activities. The San Joaquin Valley is considered an endemic area for Valley Fever.

Construction activities would generate fugitive dust that could contain *C. immitis* spores. The Project would minimize the generation of fugitive dust during construction activities by complying with the SJVAPCD's Regulation VIII. Therefore, compliance with this regulation would reduce Valley Fever impacts to a less than significant level.

During operations, dust emissions are anticipated to be negligible, because most of the Project area would be occupied by buildings, pavement, and landscaped areas. This condition would preclude the possibility of the Project from generating fugitive dust that may contribute to Valley fever exposure. Impacts would be less than significant.

Carbon Monoxide Hotspot

CO emissions are a function of vehicle idling time, meteorological conditions, and traffic flow. Under certain extreme meteorological conditions, CO concentrations near congested roadways or intersections may reach unhealthy levels (i.e., adversely affecting residents, school children, hospital patients, the elderly, etc.). CO concentrations at congested intersections that experience high levels of traffic and elevated background concentrations may reach unhealthy CO levels that affect nearby sensitive receptors. According to the SJVAPCD, background concentrations of CO are still high enough to be considered potential problems in urban areas with high levels of traffic congestion. The SJVAPCD has established the following screening criteria to determine if a project could result in a violation of the CO standard:

- 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
- A traffic study indicates that the project would substantially worsen an already existing LOS F on one or more streets in the project vicinity.

According to the Transportation Impact Analysis (TIA) prepared by Stantec, the Project would not result in a worse LOS at any intersection when comparing the existing conditions to existing plus Project conditions (see Appendix H). As a result, the Project would not result in a carbon monoxide hotspot and the impact is less than significant.

Health Risk Assessment

Construction

A construction HRA was prepared in accordance with SJVAPCD and OEHHA guidance to estimate the health risk posed to the maximum exposed individual receptor (MEIR) from DPM generated during Project construction. The complete HRA including modeling input data are detailed in Appendix B and the modeling output files and calculations are provided as an attachment to Appendix B. Results of the HRA are summarized in Table 3.3-7.

Table 3.3-7: Health Risks from Project Construction at the Maximally Exposed Sensitive Receptor

Health Impact Metric	Carcinogenic Inhalation Health Risk in One Million	Chronic Inhalation Hazard Index (pre-construction)[2]	Chronic Inhalation Hazard Index (onsite construction)[2]	Chronic Inhalation Hazard Index (offsite roadway improvements)[2]
MEIR	17.7	0.016	0.009	0.012
Significance Thresholds	**20**	**1**	**1**	**1**
Exceeds Threshold?	***No***	***No***	***No***	***No***

Notes:
[1] MEIR = maximally exposed individual receptor
[2] Chronic non-cancer hazard index was estimated by dividing the annual DPM concentration (as PM_{10} exhaust) by the REL of 5 $\mu g/m^3$.
Source: Appendix B

Operational Emissions

The greatest potential during long-term operations for exposure to TACs is from the use of heavy-duty diesel trucks and stationary generators that use diesel fuel. The Project is a residential development. Once operational, the majority of vehicle trips to the Project site would be from residents and, as a result, the Project would attract very few diesel truck trips. Additionally, the Project does not propose any stationary generators onsite. For these reasons, once operational, the Project would not be expected to expose nearby sensitive receptors to substantial amounts of air toxics.

However, the Project would site new, onsite sensitive receptors within 300 feet of an existing gas station and 500 feet of Highway 120. According to the California Supreme Court decision in the case of *California Building Industry Association v. Bay Area Air Quality Management District* (2015) 62 Cal 4th 369, lead agencies are not required under CEQA to analyze the impact of the existing environmental conditions on a project's future users or residents unless the project will exacerbate the existing environmental hazards of conditions. However, the City's general plan policies, and SJVAPCD recommendations require an evaluation of potential health risk impacts to new sensitive receptors when locating near sources of TACs. The complete HRA, including modeling input data, are detailed in Appendix B. The modeling output files and calculations are provided as an attachment to Appendix B.

Results of the operational HRA are summarized in Table 3.3-8. As shown in **Error! Reference source not found.** 3.3-8, the risk posed to new, onsite receptors from the nearby highway and gas station would be less than 20 in one million.

Table 3.3-8: Health Risks Posed to New, Onsite Receptors from Existing TAC Sources

TAC Source	Carcinogenic Inhalation Health Risk in One Million	Chronic Inhalation Hazard Index (onsite construction)[1]
Highway 120 – DPM emissions	7.76	0.002
Gas Station – Benzene emissions	1.33	0.001
Total Risk	9.09	0.003
Significance Thresholds	**20**	**1**
Exceeds Threshold?	***No***	***No***

Notes:

[1] Chronic non-cancer hazard index was estimated by dividing the annual DPM concentration (as PM_{10} exhaust) by the REL of 5 $\mu g/m^3$ and the annual benzene concentration by the REL of 27.

Source: Appendix B

As such, the existing TAC sources would not expose new, onsite receptors to a significant health risk. Moreover, consistent with 2024 CalGreen building standards, as a residential Project, the Applicant would implement filters with a Minimum Efficiency Reporting Value (MERV) 13. MERV 13 filters have an efficiency rating of 50 percent for particles 0.30 to 1.0 microns, 80 percent for particles 1.0 to 3.0 microns, and 90 percent for particles 3.0 to 10.0 microns (USEPA 2022). Therefore, while the existing environmental conditions are not required to be evaluated under CEQA, the risk posed to new, onsite receptors would be greatly reduced by the MERV 13 requirements under CalGreen. As such, during operation, the Project would have a less than significant impact.

Level of Significance Before Mitigation
Less Than Significant Impact.

Mitigation Measures
No mitigation is necessary.

Level of Significance After Mitigation
Less Than Significant Impact.

Impact AIR-4	**Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?**

Impact Analysis
The Project would develop residential uses and construction and operation of the Project would not generate substantial odors that would affect substantial number of people. Land uses typically considered associated with odors include wastewater treatment facilities, waste-disposal facilities, or agricultural operations and the Project does not contain any land uses typically associated with emitting odors. During operation, Project developments could generate odors from cooking or trash enclosures. These odors would not be substantial enough to be considered nuisance odors that would affect a substantial number of people. During Project related construction activities on the Project site, construction equipment exhaust, painting, and paving activities would temporarily generate odors. Any construction-related odor emissions would be temporary and intermittent. Additionally, noxious odors would be confined to the

immediate vicinity of the construction equipment. Therefore, Project impacts from odors would be less than significant.

Level of Significance Before Mitigation
Less Than Significant Impact.

Mitigation Measures
No mitigation is necessary.

Level of Significance After Mitigation
Less Than Significant Impact.

3.4 BIOLOGICAL RESOURCES

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

3.4.1 Environmental Setting

Stantec Consulting Services Inc. (Stantec) prepared a Biological Resources Assessment (BRA) and Wetland Delineation Report for the Project in November 2022. The BRA is included as Appendix C and the Wetland Delineation Report is included as Appendix D.

The Project site is approximately 59.19 acres and is surrounded by urban development on all sides. The topography of the Project site is nearly level, at an elevation of approximately 30 feet above mean sea level. Most of the Project site consists of sandy scrub habitat dominated by Telegraph weed (*Heterotheca grandiflora*). The Project site is heavily disturbed from agricultural activities and a majority of the Project site has been tilled resulting in upturned soil and uprooted, dead vegetation.

Prior to conducting field surveys, background desktop research was completed to identify existing biological resources at the Project site and surrounding area. Resources reviewed during background research include:

- California Natural Diversity Database (CNDDB) query of the Project area and all areas within 5 miles of the Project boundary.
- United States Fish and Wildlife Service (USFWS) Information for Planning and Conservation (IPaC) query for the Project area.
- California Native Plant Society Rare and Endangered Plant Inventory query of the “Manteca, Avena, Peters, Lathrop, Stockton West, Stockton East, Salida, Vernalis and Ripon United States Geological Survey (USGS) 7.5-minute Quadrangles.
- USFWS list of endangered, threatened, and candidate species that may occur within the Project site.
- USFWS Designated Critical Habitat data for federally threatened and endangered species.

The Project site was surveyed on October 7, 2022 for wildlife present within the Project site, and assess the suitability of habitats onsite to support special-status species. During the onsite biological reconnaissance survey, Stantec biologists observed an unnamed seasonal drainage on the far east side of the Project area, approximately 50 feet south of E. Atherton Drive. The drainage was observed due to a change in vegetation community. The drainage is approximately 150 feet in length and 20 feet wide. Stantec completed a wetland delineation on October 24 and 26, 2022 to determine if potential features were considered wetlands or other waters. The wetland delineation was conducted in accordance with the Corps of Engineers Wetlands Delineation Manual and the revised procedures in the Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region. Additionally, all mapped features were assessed for potential Regional Water Quality Control Board (RWQCB) jurisdiction following the Porter-Cologne Water Quality Control Act regulations and guidance which states that all waters defined as “wetlands” under the United States Army Corps of Engineer’s (USACE) three-parameter requirement, including isolated features, would likely be considered RWQCB jurisdictional.

3.4.2 Previous Environmental Analysis

City of Manteca General Plan Update EIR

Future development projects under the General Plan Update could result in the direct and indirect loss or indirect disturbance of special-status plant or animal species or their habitats that are known to occur, or have potential to occur, in the region. The City has prepared the General Plan Update to include numerous policies and actions intended to protect special-status species and sensitive natural communities, including riparian habitat, wetlands, and other waters of the United States from adverse effects associated with future development and improvement projects. Subsequent development projects would be required to comply with the General Plan Update and adopted federal, State, and local regulations for the protection of special-status species, sensitive natural communities' riparian habitat, wetlands, and other waters of the United States. Additionally, the City requires development projects to comply with the requirements of the San Joaquin County Multi-Species Habitat Conservation and Open Space Plan (SJMSCP) and pay mitigation fees on a per-acre basis to mitigate impacts to the various habitat and biological resources. Therefore, with implementation of the General Plan policies and actions and compliance with federal, State, and local regulations, the General Plan Update EIR determined impacts on biological resources would be less than significant (City of Manteca 2022a).

3.4.3 Project-Specific Impact Analysis

Impact BIO-1	**Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?**

Impact Analysis

As discussed in the BRA, one plant species, lesser saltscale (*Atriplex minuscula*), has a low potential to occur within the Project area. While the Project occurs within the range for this species, the disturbed nature of the Project area provides low quality habitat for this species. Due to the low-quality habitat, this species is not expected to occur. No effects to special-status plants are anticipated.

Two wildlife species, loggerhead shrike (*Lanius ludovicianus*) and Swainson's hawk (*Buteo swainsoni*), have moderate potential to occur within the Project area. The small grove of deciduous trees located just outside the Project area to the north provide suitable nesting habitat for Swainson's hawk, and the small grove of trees and line of trees within the median of E. Atherton Dr provide suitable nesting habitat for loggerhead shrike. Marginal foraging habitat occurs within the Project area. One species, burrowing owl (*Athene cunicularia*), has low potential to occur in the Project area. No ground squirrels or ground squirrel burrows were observed during the reconnaissance survey to provide habitat for burrowing owl. The species identified as having low potential to occur is not expected to occur due to the poor-quality habitat within the Project area. The Project area does provide suitable nesting habitat for migratory birds. There is a small grove of deciduous trees located just outside the Project area to the north, and a line of trees within the median of E. Atherton Drive that provides suitable nesting habitat for non-listed birds. The presence of trees onsite and in the vicinity of the Project area could provide suitable nesting and foraging habitat for various bird species that are protected by the Migratory Bird Treaty Act or California Fish and Game Code.

If construction activities occur during the typical nesting season (February 1 through August 31) this may cause direct effects (e.g., tree removal and vegetation clearing) and indirect effects (e.g., noise and vibration) to nesting birds, causing adults to abandon active nests and result in nest failure and reduced reproductive success. Prior to construction, the Project would implement Mitigation Measure BIO-1, which involves conducting pre-construction nesting bird surveys to document all nests on and adjacent to the Project site. Protective buffers would be implemented around all documented nests during construction to minimize disturbance to nesting birds. Therefore, impacts on special-status wildlife and nesting migratory birds would be less than significant with implementation of Mitigation Measure BIO-1.

Level of Significance Before Mitigation
Potentially Significant Impact.

Mitigation Measures

MM BIO-1: **Avoid Disturbance of Nesting Birds.** Vegetation removal and construction activities shall be initiated during the non-nesting season for migratory birds from September 1 to January 31. If work cannot be initiated during this period, a nesting bird survey shall be performed by a qualified biologist for species protected by the Migratory Bird Treaty Act and California Fish and Game Code within a 250-foot radius of proposed construction activities for passerines, and 0.25-mile for raptors, no more than two weeks prior to the start of construction activities. If active nests are found, a no-disturbance buffer shall be placed around the nest until young have fledged or the nest is determined to be no longer active by the biologist. The size of the buffer shall be determined by the biologist based on species and proximity to activities and may be reduced at the discretion of the biologist. Active nests shall be monitored by a biologist to determine time of fledging.

Level of Significance After Mitigation
Less Than Significant Impact with Mitigation.

Impact BIO-2	**Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?**

Impact Analysis
The Project would not alter or adversely affect riparian areas or other sensitive natural communities, including wetlands, because no riparian areas or other sensitive natural communities were identified. Predominant species observed within the Project area include Telegraph weed, Russian thistle, Palmer amaranth (*Amaranthus palmeri*), common sunflower (*Helianthus annuus*), mat amaranth (*Amaranthus blitoides*) and colocynth. Other species observed include a species of oat (*Avena* spp.), species of radish (*Rhaphanus* spp.), and hedge bindweed (*Calystegia sepium*). There is a change of vegetation within the Project area where there is a seasonal drainage on the eastern side of the Project area. Species observed within the seasonal drainage include giant reed (*Arundo donax*), rough cocklebur (*Xanthium strumarium*), Palmer amaranth (*Amaranthus palmeri*), brome fescue *(Festuca bromoides*), hairy crab grass (*Digitaria sanguinalis*), California melic (*Melica imperfecta*), Bermuda grass (*Cynodon dactylon*), and tall manna grass *(Glyceria elata*). Telegraph weed and Russian thistle were also present within the

seasonal drainage. Therefore, the proposed Project would have no impact on riparian areas or other sensitive natural communities.

Level of Significance Before Mitigation
No Impact.

Mitigation Measures
No mitigation is necessary.

Level of Significance After Mitigation
No Impact.

Impact BIO-3	**Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?**

Impact Analysis
The Project would not adversely affect state or federally protected wetlands because no wetlands under the RWQCB or USACE jurisdiction were identified on the site. The National Wetlands Inventory showed two riverines within the Project area, and a seasonal drainage that was observed during the biological reconnaissance survey. Wetland delineations then occurred at identified sampling points within the Project area based on the National Wetlands Inventory data and observations from the biological survey. Based on the findings in the wetland delineation report (Appendix D), the Project area contains no wetlands or other waters that are potentially subject to the USACE jurisdiction pursuant to the Clean Water Act. No portion of the Project area meets the three criteria for federal wetlands (dominance of hydrophytic vegetation, evidence of wetland hydrology, and hydric soils) and no surface water was present during the survey event. In addition, no other waters were identified based on the lack of an ordinary high-water mark (OHWM) and connectivity to a downstream Traditional Navigable Water. The three water features are also not considered potential waters of the State because they lack an OHWM and connectivity to downstream waters and did not contain hydrophytic vegetation, evidence of wetland hydrology, and hydric soils. As such, there is no impact to state or federally protected wetlands.

Based off the site plan presented in Figure 2-1, no construction is planned within at least 25 feet of the seasonal drainage; therefore, no impacts are expected to this feature and no mitigation measures are required.

Level of Significance Before Mitigation
No Impact.

Mitigation Measures
No mitigation is necessary.

Level of Significance After Mitigation
No Impact.

Impact BIO-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?**

Impact Analysis
Extensive development, roadways, and highways surround the Project site, which minimizes the opportunity for wildlife to move freely across the vicinity of the Project site. In addition, the Project site does not represent a corridor that links areas of open space lands. Additionally, the CDFW California Habitat Connectivity map identifies the Project site as being located in an area with limited connectivity opportunity (CDFW 2022). As such, the Project site is not considered to support wildlife movement or native wildlife nursery sites, and there would be no impact from construction and operation of the Project.

Level of Significance Before Mitigation
No Impact.

Mitigation Measures
No mitigation is necessary.

Level of Significance After Mitigation
No Impact.

Impact BIO-5	**Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?**

Impact Analysis
The Project site is covered by non-native grasses and weeds and does not contain any existing trees. Therefore, the Project would not require the removal of any trees that could conflict with a tree preservation policy or ordinance. The Project would not conflict with any policies or ordinances protecting biological resources and there would be no impact.

Level of Significance Before Mitigation
No Impact.

Mitigation Measures
No mitigation is necessary.

Level of Significance After Mitigation
No Impact.

Impact BIO-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?**

Impact Analysis
The SJMSCP is a comprehensive program for assessing and mitigating the biological impacts of converting open space or biologically sensitive lands to urban development in San Joaquin County, including the City of Manteca. For the conversion of open space to non-open space uses that affect covered plant, fish, and wildlife species, the SJMSCP provides three compensation methods: preservation of existing sensitive lands, creation of new comparable habitat on the project site, or

payment of fees that would be used to secure preserve lands outside the project site. In addition to fee payments, the SJMSCP identifies and requires the applicants to abide by Incidental Take Minimization Measures, which are protection measures that avoid direct impacts of development on special-status species (SJCOG 2000).

The SJMSCP was approved in 2000 and the City of Manteca is a signatory to the SJMSCP. The San Joaquin Council of Governments implements the SJMSCP on a project-by-project basis. Based on review of the SJMSCP Compensation Zone Map, the Project site is in Category B – Pay Zone A and is therefore subject to the requirements of the SJMSCP. The Project would comply with the requirements of the SJMSCP, which includes payment of a development fee in accordance with Chapter 13.40 of the Manteca Municipal Code. Additionally, compliance with the SJMSCP requires that a SJMSCP biologist perform a pre-construction survey of the Project site prior to ground disturbance. The SJMSCP biologist would issue Incidental Take Minimization Measures to the Project based on the findings of the pre-construction survey. As the Project would comply with the requirements of the SJMSCP and pay the required development fee as established in Title VI of the City's Development Fee Schedule, the Project would not conflict with the provisions of the SJMSCP and the impact would be less than significant.

Level of Significance Before Mitigation
Less Than Significant Impact.

Mitigation Measures
No mitigation is necessary.

Level of Significance After Mitigation
Less Than Significant Impact.

3.5 CULTURAL RESOURCES

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

3.5.1 Environmental Setting

The 59.19-acre Project site is currently vacant and located south of Highway 120. Several unpaved roadways extend throughout the site. A paved roadway, referred as Quintal Road, also extends across the northwestern portion of the site, and connects to S. Main Street. The site topography is generally flat with an elevation of approximately 30 feet above mean sea level. Surrounding land uses include single-family and multi-family residential uses to the east and south; Highway 120 and commercial uses to the north; and S. Main Street, vacant land, and commercial uses to west. There is a Chevron gas station located on S. Main Street and adjacent to the southwest corner of the Project site.

To determine the presence of cultural resources within the Project site and vicinity, a Cultural Resources Evaluation Report (Appendix E) was prepared on October 14, 2022 by Stantec. The cultural resources report included a records search conducted at the Central California Information Center of the California Historical Resources Information System (CHRIS), a desktop literature review, Native American outreach, and a pedestrian field survey of all locations of anticipated ground disturbance for construction, staging, and access.

The records search included the entire Project site, as well as a 0.25-mile buffer. According to the records search, two studies have been conducted within the Project site and the 0.25-mile search radius. The records search identified 11 additional previous studies conducted within 0.5-mile search of the Project site. According to these studies, no cultural resources have been documented within the Project site and two resources have been documented within the 0.5-mile search radius. No evidence of prehistoric or historic cultural resources were observed during the survey.

3.5.2 Previous Environmental Analysis

City of Manteca General Plan Update EIR

While the General Plan Update does not directly propose any adverse changes to any historic or archeological resources, future development allowed under the General Plan Update could affect known or unknown resources which have not yet been identified. As future development and infrastructure projects are considered by the City, each project would be evaluated for conformance with the City's General Plan Update, Municipal Code, and other applicable State and local regulations. In addition, if historic or prehistoric archeological artifacts are discovered during grading or construction activities, all work within 100 feet of the discovery shall cease, the City shall be notified, and a qualified archeologist, paleontologist, or historian shall examine the discovery and recommend appropriate protection and preservation measures. In the event human remains are discovered, the General Plan Update requires that human remains are treated in compliance with the provisions of California Health and Safety Code Section 7050.5 and California PRC Section 5097.98. Therefore, the General Plan Update determined impacts on historical and archeological resources and human remains would be less than significant (City of Manteca 2022a).

3.5.3 Project-Specific Impact Analysis

Impact CUL-1	**Cause a substantial adverse change in the significance of a historical resource as identified in Section 15064.5?**

Impact Analysis
The Project site is vacant and mostly covered with by non-native grasses and weeds. Several unpaved roadways extend throughout the site. A paved roadway, referred as Quintal Road, also extends across the northwestern portion of the site, and connects to S. Main Street. A desktop review of buildings over the age of 45 was conducted by an architectural historian, and no historic resources (likely eligible under state, federal, or local historic preservation criteria) were identified. Thus, the Project would have no impact on any known or potential historical resources.

Level of Significance Before Mitigation
No Impact.

Mitigation Measures
No mitigation is necessary.

Level of Significance After Mitigation
No Impact.

Impact CUL-2	**Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?**

Impact Analysis
The archival records search performed as part of the cultural resources analysis did not result in the identification of prehistoric archaeological resources within the Project site. Additionally, previously unidentified subsurface archaeological resources were not identified within the Project area during the field survey. As such, the Project is not anticipated to have an impact on any known archaeological

resources. However, construction activities associated with the Project which involve ground distributing work has the potential to encounter undiscovered archaeological resources. In the event a previously undiscovered subsurface unique archaeological resource is found at the Project site, the Project would comply with General Plan Update Action RC-11j, which requires all new development, infrastructure, and other ground-disturbing projects to comply with the following conditions:

- *If construction or grading activities result in the discovery of significant historic or prehistoric archaeological artifacts or unique paleontological resources, all work within 100 feet of the discovery shall cease, the Development Services Director shall be notified, the resources shall be examined by a qualified archaeologist, paleontologist, or historian for recommended protection and preservation measures; and work may only resume when recommended protections are in place and have been approved by the Development Services Director; and*

- *If construction or grading activities result in the discovery of significant tribal cultural resources, all work within 100 feet of the discovery shall cease, the Development Services Director shall be notified, the resources shall be examined by a qualified archaeologist and Native American tribes on the City's SB 18 and AB 52 list for recommended protection and preservation measures and work may only resume when recommended protections are in place and have been approved by the Development Services Director; and*

- *If human remains are discovered during any ground disturbing activity, work shall stop until the Development Services Director and the San Joaquin County Coroner have been contacted; if the human remains are determined to be of Native American origin, the Native American Heritage Commission and the most likely descendants have been consulted; and work may only resume when measures to relocate or preserve the remains in place, based on the above consultation, have been taken and approved by the Development Services Director.*

The implementation of General Plan Update Action RC-11j would be in accordance with the standard inadvertent discovery procedures to reduce potential impacts to previously undiscovered subsurface unique archaeological resources. Therefore, with the implementation of General Plan Update Action RC-11j, potential impacts to undiscovered archaeological resources would be less than significant.

Level of Significance Before Mitigation
Less Than Significant Impact.

Mitigation Measures
No mitigation is necessary.

Level of Significance After Mitigation
Less Than Significant Impact.

Impact CUL-3	Disturb any human remains, including those interred outside of dedicated cemeteries?

Impact Analysis

Though the potential for human remains is low, the Project would require excavation and ground disturbing activities which could lead to the discovery of human remains or other cultural resources that are currently undiscovered. The Project would comply with the provisions of the California Health and Safety Code Section 7050.5 and California PRC Section 5097.98. If previously undiscovered human burial sites are found on the Project site, the Project would comply with General Plan Update Action RC-11j which outlines the following procedures in the event that human remains are discovered:

- *If construction or grading activities result in the discovery of significant historic or prehistoric archaeological artifacts or unique paleontological resources, all work within 100 feet of the discovery shall cease, the Development Services Director shall be notified, the resources shall be examined by a qualified archaeologist, paleontologist, or historian for recommended protection and preservation measures; and work may only resume when recommended protections are in place and have been approved by the Development Services Director; and*

- *If construction or grading activities result in the discovery of significant tribal cultural resources, all work within 100 feet of the discovery shall cease, the Development Services Director shall be notified, the resources shall be examined by a qualified archaeologist and Native American tribes on the City's SB 18 and AB 52 list for recommended protection and preservation measures and work may only resume when recommended protections are in place and have been approved by the Development Services Director; and*

- *If human remains are discovered during any ground disturbing activity, work shall stop until the Development Services Director and the San Joaquin County Coroner have been contacted; if the human remains are determined to be of Native American origin, the Native American Heritage Commission and the most likely descendants have been consulted; and work may only resume when measures to relocate or preserve the remains in place, based on the above consultation, have been taken and approved by the Development Services Director.*

Compliance with California Health and Safety Code Section 7050.5, California PRC Section 5097.98, and General Plan Update Action RC-11j would reduce potential impacts on human remains to a less than significant level.

Level of Significance Before Mitigation
Less Than Significant Impact.

Mitigation Measures
No mitigation is necessary.

Level of Significance After Mitigation
Less Than Significant Impact.

3.6 ENERGY

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

3.6.1 Environmental Setting

PG&E is the provider of electrical and natural gas supplier to most of the County. PG&E's service area spans 70,000 square miles and serves over 16 million people in Northern and Central California. In 2020, PG&E distributed approximately 35,838 gigawatt-hours (GWh) of electricity and 848,705 million cubic feet of natural gas across its service area (PG&E 2021). In 2020, approximately 85 percent of the electricity supplied from PG&E was produced free of GHG Emissions. Sources of electricity sold by PG&E in 2020 were:

- 30.6 percent eligible renewable (solar, wind, geothermal, biomass, and small hydroelectric)
- 16.4 percent fossil fuel-fired
- 42.8 percent nuclear
- 10.1 percent large hydroelectric

The California Energy Commission (CEC) tracks electricity and natural consumption across the state for residential and non-residential sources. In 2020, San Joaquin County used a total of 5,737 GWh of electricity and 184 millions of therms of natural gas. Approximately 63 percent of the electricity usage and 51 percent of the natural gas use in the County came from non-residential sources (CEC 2016a, CEC 2016b).

3.6.2 Previous Environmental Analysis

City of Manteca General Plan Update EIR

Buildout of the General Plan Update would use energy resources for the operation of buildings (electricity and natural gas), for on-road vehicle trips (e.g., gasoline and diesel fuel), and from off-road construction activities (e.g., diesel fuel). The General Plan Update would comply with all applicable federal, state, and local regulations regulating energy usage. Additionally, developers of individual projects would be responsible for conserving energy, to the extent feasible, and would rely heavily on reducing per capita energy consumption, including through Statewide and local measures that promote renewable and/or alternative energy sources and encourage pedestrian/bicycle modes of transportation. Therefore, the

General Plan Update EIR determined impacts related to energy would be less than significant (City of Manteca 2022a).

3.6.3 Project-Specific Impact Analysis

The energy requirements for the Project were determined using the construction and operational estimates generated from the Air Quality Analysis (refer to Section 3.3). Short-term construction and long-term energy consumption are discussed below. Energy consumption calculations are provided in Appendix B.

Impact EN-1	**Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?**

Impact Analysis
The following analysis addresses the energy consumption from both the short-term construction and long-term operations of the Project and are discussed separately below. Energy calculations are based on the air quality CalEEMod output files.

Short-Term Construction

Off-Road Equipment

Construction of the Project would use standard construction equipment, including but not limited to excavators, tractors, graders, haul trucks, scrapers, backhoes, cranes, and pavers. In 2021, approximately 3.7 billion gallons of diesel fuel was consumed within California (EIA 2023). As shown in Table 3.6-1, construction activities associated with the Project would be estimated to consume 306,008 gallons of diesel fuel, which represents 0.00008 percent of the State's annual diesel demand.

Table 3.6-1: Construction Off-Road Fuel Consumption

Project Component	Total Annual Fuel Consumption (gallons)
Pre-construction Utilities	12,678
Phase A Construction Off-Road Equipment	107,921
Phase B Construction Off-Road Equipment	137,277
Offsite Roadway Improvement Phase Equipment	48,132
Total	**306,008**

Source: Appendix B

Construction of the proposed residential development would include site preparation, grading, building construction, paving, and architectural coating. Additionally, the construction of offsite improvements would require construction equipment for grubbing and land clearing, grading and excavation, drainage, utilities, subgrade work, and paving. The Project site does not contain any unique site characteristics, and the Project construction equipment would be standard for new residential development in the area. Therefore, it is expected that construction fuel consumption would not be any more inefficient, wasteful, or unnecessary than at other construction sites in the region, and impacts would be less than significant.

On-Road Vehicles

On-road vehicles for construction workers, vendors, and haulers would require fuel for travel to and from the Project site during construction. Table 3.6-2 provides an estimate of the total on-road vehicle fuel usage during construction.

Table 3.6-2: Construction On-Road Fuel Consumption

Project Component	Total Annual Fuel Consumption (gallons)
Pre-construction Utilities	4,951
Phase A Construction Off-Road Equipment	124,097
Phase B Construction Off-Road Equipment	320,359
Offsite Roadway Improvement Phase Equipment	3,083
Total	**452,491**

Source: Appendix B

The on-road vehicles used by workers, vendors, and haulers would be typical for the construction of new residential development and offsite roadway improvements. For comparison, in 2021, approximately 3.7 billion gallons of diesel fuel was consumed within California (EIA 2023). Thus, the diesel fuel required to power the off-road equipment during construction of the Project would represent approximately 0.0001 percent of the State's annual diesel demand.

Therefore, it is expected that Project on-road vehicle fuel consumption would not be any more inefficient, wasteful, or unnecessary than at other construction sites in the region.

Long-term Operation

Transportation Energy Demand

Table 3.6-3 provides an estimate of the daily and annual fuel consumed by vehicles traveling to and from the Project site. These estimates were derived using the same assumptions for the operational air quality analysis prepared for the Project. For details regarding the assumptions used in the calculations, please refer to Appendix B.

Table 3.6-3: Long-Term Operational Vehicle Fuel Consumption

Vehicle Type	Total Annual Fuel Consumption (gallons)
Passenger Cars (LDA)	284,915
Light Trucks and Medium Duty Vehicles (LDT1, LDT2, MDV)	313,763
Light-Heavy to Heavy-Heavy Diesel Trucks (LHD1, LHD2, MHDT, HHDT)	237,819
Motorcycles (MCY)	1,367
Other (OBUS, UBUS, SBUS, MH)	6,301
Total	**844,166**

Source: Appendix B

As shown in Table 3.6-3, annual vehicular fuel consumption is estimated to be 844,166 gallons of a combination of gasoline and diesel fuel. In 2021, California consumed approximately 10.2 billion gallons of gasoline and approximately 3.7 billion gallons of diesel fuel (EIA 2023). Thus, the diesel fuel required to power the off-road equipment during construction of the Project would represent less than 0.0001 percent of the State's annual diesel demand. The Project would constitute new residential development within an established community and would not be opening a new geographical area for development such that it would draw mostly new trips or substantially lengthen existing trips. The Project would be well positioned to accommodate the existing population. Additionally, the Project would provide features that encourage alternative modes of transportation, such as bicycle parking, EV parking, extension of a Class I bicycle path along the northern frontage of E. Atherton Drive, and the construction of a new bus stop on E. Atherton Drive. For these reasons, it would be expected that vehicular fuel consumption associated with the Project would not be any more inefficient, wasteful, or unnecessary than for any other similar land use activities in the region, and impacts would be less than significant.

Building Energy Demand

The Project would be designed to be 100 percent electric and would not use natural gas. It is estimated the Project would demand 5,048,019 kilowatt hours of electricity on an annual basis, representing 0.1 percent of the total electricity used by San Joaquin County (Appendix B). The Project would be designed in accordance with CalGreen Tier 1 standards, which sets forth requirements related to energy and water conservation. Further, CalGreen standards require single-family housing constructed after January 1, 2020 to include rooftop photovoltaic cells. While the Project would place solar panels on the roofs of the single-family units and the covered parking spaces for the multi-family component, the energy calculations did not factor in the proposed solar panels to provide a conservative analysis.

The Project would also be required to comply with the energy efficiency standards set forth by Title 24 of the California Administrative Code. Title 24 requires that the Project meet a number of conservation standards, including installation of water-efficient fixtures and energy-efficient appliances. Title 24 also regulates energy consumption for the heating, cooling, ventilation, and lighting of residential buildings, and is enforced by the City. Compliance with Title 24 would ensure reduction in the use of fuel, water, and energy by the Project. Therefore, while the Project would result in increased electricity demand, the electricity would be consumed more efficiently and would be typical of residential development. Compliance with future building code standards would also result in increased energy efficiency. Therefore, operation of the Project would not result in the inefficient, wasteful, and unnecessary consumption of energy, and the impact is less than significant.

Level of Significance Before Mitigation
Less Than Significant Impact.

Mitigation Measures
No mitigation is necessary.

Level of Significance After Mitigation
Less Than Significant Impact.

Impact EN-2	Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

Impact Analysis
The City's General Plan includes the following goals and policies to maximize opportunities for energy efficiency, conservation, and independence:

- **Policy RC-4.4:** Require all new public and privately constructed buildings to meet and comply with construction and design standards that promote energy conservation, including the most current "green" development standards in the California Green Building Standards Code.
- **Policy RC-4.5:** Support expanded innovative and green building best practices including, but not limited to, LEED certification for all new development and retrofitting existing uses and encourage public and private projects to exceed the most current "green" development standards in the California Green Building Standards Code.
- **Policy RC-4.8:** Encourage measures, including building siting and shading and use of shade trees, to reduce urban heat island effects.
- **Policy RC-4.10:** Encourage the conservation of petroleum products.
- **Policy RC-5.4:** Require installation of energy-efficient appliances and equipment, including wood-burning devices, in development projects to meet current standards for controlling air pollution, including particulate matter and toxic air contaminants.
- **Action RC-4c:** Continue to review development projects to ensure that all new public and private development complies with or exceeds the California Code of Regulations, Title 24 standards as well as the energy efficiency standards established by the General Plan and the Municipal Code.

As discussed in Section 3.4, Greenhouse Gas Emissions, the City's Climate Action Plan (CAP) also includes strategies to reduce energy use and increase building efficiency. The Project would not conflict with the energy policies of the General Plan Update nor the strategies in the City's adopted CAP. The Project would constitute development within an established community and would not be opening a new geographical area for development such that it would draw mostly new trips, or substantially lengthen existing trips. The Project would be designed in accordance with CalGreen Tier 1 standards and comply with the version of Title 24 that is applicable at the time that building permits are issued. Therefore, the Project would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency, and the impact would be less than significant.

Level of Significance Before Mitigation
Less Than Significant Impact.

Mitigation Measures
No mitigation is necessary.

Level of Significance After Mitigation
Less Than Significant Impact.

3.7 GEOLOGY AND SOILS

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

3.7.1 Environmental Setting

Regional Setting

The City is located within the San Joaquin Valley in the central portion of the Great Valley Geomorphic Province. The Great Valley Province is a broad basin bounded by the Sierra Nevada on the east and the Coast Ranges on the west. The San Joaquin River is located just south and west of the City. This major river drains the Great Valley Province into the San Joaquin Delta to the north, ultimately discharging in the San Francisco Bay to the northwest.

The 1972 Alquist-Priolo Earthquake Fault Zoning Act requires the California Geological Survey to establish regulatory Earthquake Fault Zones around the surface ruptures of active faults to reduce the hazard of surface fault rupture to structures built for human occupancy. There are no Alquist-Priolo Earthquake Fault Zones in the City (City of Manteca 2022a). However, the City is located within a seismically active region, and earthquakes have the potential to cause ground shaking of significant magnitude. The closest known faults classified as active by the USGS include an unnamed fault east of the City of Tracy, about 5 miles west of Manteca, and the San Joaquin fault, about 15 miles to the southwest of Manteca. The Midway fault is located approximately 20 miles to the west. Other faults that could potentially affect Manteca include the Corral Hollow-Carnegie fault, the Greenville fault, the Antioch fault, and the Los Positas fault (City of Manteca 2022a).

Project Site Setting

The Project site is currently vacant and mostly covered by non-native grasses and weeds. Several unpaved roadways extend throughout the site. A paved roadway, referred as Quintal Road, also extends across the northwestern portion of the site, and connects to S. Main Street. The site topography is generally flat with an elevation of approximately 30 feet above mean sea level.

A Preliminary Geotechnical Investigation was prepared for the Project by Rockridge Geotechnical on November 11, 2021 (Appendix F). The Preliminary Geotechnical Investigation included exploring subsurface conditions at the site by performing 15 cone penetration tests, advancing 8 hand auger borings, performing laboratory testing, and conducting engineering analyses to develop conclusions and recommendations related to foundation types, foundation settlement, site seismicity and seismic hazards, CBC design criteria, and construction considerations.

Based on the borings, the Project site is generally underlain by medium dense sand with varying fines content in the upper 12 to 20 feet below ground surface (bgs). Subsurface soils become interbedded with discontinuous layers of very stiff to hard clay and silty clay with dense to very dense sand and silty sand to the maximum depth explored of 50 feet bgs (Rockridge Geotechnical 2021). The depth to groundwater at the time of the investigation was about 19.6 to 24.2 feet bgs. Rockridge Geotechnical also reviewed historic groundwater data from other sites near the Project site, which indicated groundwater levels range from 13 to 15 bgs. Based on the groundwater level data measured at the site and the review of historic groundwater data, the Preliminary Geotechnical Investigation concluded a groundwater depth of 13 feet bgs should be used for planning purposes (Rockridge Geotechnical 2021).

3.7.2 Previous Environmental Analysis

City of Manteca General Plan Update EIR

As discussed in the General Plan Update EIR, future development and infrastructure projects would be evaluated for conformance with the CBC, General Plan Update policies and actions, Zoning Ordinance, and other regulations to address potential geologic hazards. Future development and improvement projects would be required to have a specific geotechnical study prepared and incorporated into the improvement design, consistent with the requirements of the CBC and City codes. In addition, the RWQCB would require a project-specific Storm Water Pollution Prevention Plan (SWPPP) to be prepared for each project that disturbs an area of 1 acre or more. The SWPPPs would include project-specific best management practices (BMPs) that are designed to control drainage and erosion. New development

under the General Plan Update would not require use of septic tanks or alternative wastewater disposal systems. The General Plan Update also includes actions and policies to ensure steps would be taken to reduce impacts to paleontological resources in the event that they are discovered during construction. Therefore, with the implementation General Plan policies and actions, along with compliance with the CBC and other regulatory requirements, the General Plan Update EIR determined impacts related to geologic hazards would be less than significant (City of Manteca 2022a).

3.7.3 Project-Specific Impact Analysis

Impact GEO-1	**Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:** **i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.** **ii) Strong seismic ground shaking?** **iii) Seismic-related ground failure, including liquefaction?** **iv) Landslides?**

Impact Analysis

i) Rupture of a known earthquake fault

The Project site is not located within a Alquist-Priolo Fault Zone and no known active or potentially active faults runs through the Project site. According to the Preliminary Geotechnical Investigation prepared for the Project by Rockridge Geotechnical in November 2021, the nearest fault is the Great Valley 07 fault segment which is located approximately 15.5 miles southwest of the Project site. Therefore, the potential for damage to structures at the Project site due to rupture of a known earthquake fault is low, and the impact would be less than significant.

ii) Strong seismic ground shaking

The Project site is located in a seismically active region and therefore, has the potential to experience strong seismic ground shaking. As stated above, the nearest fault is the Great Valley 07 segment located approximately 15.5 miles southwest of the Project site (Rockridge Geotechnical 2021). The Preliminary Geotechnical Investigation concluded that moderate to strong shaking could occur at the Project site during a large earthquake event on one of the nearby faults. However, construction of the Project would conform to the latest edition of the CBC, which includes engineering standards appropriate to withstand anticipated ground accelerations at the Project site. The Project would also be subject to General Plan Update Policies S-2.3 and S-2.4, which require a final geotechnical investigation to be conducted for the Project to ensure structures constructed at the Project site are designed to withstand anticipated ground accelerations.

As the Project would comply with the latest edition of the CBC and incorporate the recommendations of the final geotechnical investigation into the Project design in accordance with the policies of the General Plan Update, impacts related to seismic ground shaking would be less than significant.

iii) Seismic-related ground failure, including liquefaction

According to the Preliminary Geotechnical Investigation, the Project site is generally underlain by medium dense sand with varying fines content in the upper 12 to 20 feet bgs. Subsurface soils become interbedded with discontinuous layers of very stiff to hard clay and silty clay with dense to very dense sand and silty sand to the maximum depth explored of 50 feet bgs (Rockridge Geotechnical 2021). Based on the characteristics of the site soils and groundwater depth at 13 feet bgs, the Preliminary Geotechnical Investigation determined that there are several layers of potentially liquefiable soil between 13 and 42 feet bgs (Rockridge Geotechnical 2021). The liquefiable soil layers could lead to localized lateral ground deformations and loss of bearing capacity, and therefore the Preliminary Geotechnical Investigation includes recommendations related to foundations and settlement, construction considerations, and seismic design to minimize potential impacts related to liquefaction. Furthermore, the Preliminary Geotechnical Investigation recommends the potential for surface manifestations should be further evaluated during the final geotechnical investigation once groundwater levels are better characterized. The Project would conduct a final geotechnical investigation and implement the recommendations to address potential impacts related to liquefaction as required by General Plan Update Policies S-2.2, S-2.3, and S-2.4.

Additionally, the Project would be required to comply with the latest edition of the CBC, which includes engineering standards appropriate to withstand anticipated ground accelerations at the Project site. Therefore, impacts related to liquefaction would be less than significant with compliance to policies and actions from the General Plan Update and the CBC seismic design criteria.

iv) Landslides

The site topography is generally flat with an elevation of approximately 30 feet above mean sea level. The General Plan Update EIR determined the City has a low potential for landslides due to the flat surface conditions (City of Manteca 2022a). Therefore, there would be no impact related to seismically induced landslides from Project construction and operation.

Level of Significance Before Mitigation
Less Than Significant Impact.

Mitigation Measures
No mitigation is necessary.

Level of Significance After Mitigation
Less Than Significant Impact.

Impact GEO-2	Result in substantial soil erosion or the loss of topsoil?

Impact Analysis
Project construction would involve ground disturbance activities, such as grading and excavation that could expose soils to sources of wind or water, resulting in the potential for erosion and sedimentation to occur on and off the Project site. As discussed in Section 3.10, Hydrology and Water Quality, the Project would disturb more than 1 acre and would require coverage under the NPDES General Construction Permit. The NPDES General Construction Permit requires preparation and implementation of a SWPPP. The SWPPP would include standard construction BMPs to minimize erosion and loss of topsoil at the Project site in accordance with General Plan Update Policy RC-3.1. Implementation of a SWPPP and compliance with policies and actions from the General Plan Update would ensure the Project would not result in substantial erosion or loss of topsoil and impacts would be less than significant.

Level of Significance Before Mitigation
Less Than Significant Impact.

Mitigation Measures
No mitigation is necessary.

Level of Significance After Mitigation
Less Than Significant Impact.

Impact GEO-3	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 offsite landslide, lateral spreading, subsidence, liquefaction, or collapse?

Impact Analysis
The site topography is generally flat and not susceptible to landslides. According to the Preliminary Geotechnical Investigation, the Project site is generally underlain by medium dense sand with varying fines content in the upper 12 to 20 feet bgs. Subsurface soils become interbedded with discontinuous layers of very stiff to hard clay and silty clay with dense to very dense sand and silty sand to the maximum depth explored of 50 feet bgs (Rockridge Geotechnical 2021). Soil susceptible to liquefaction includes loose to medium dense sand and gravel, low-plasticity silt, and some low-plasticity clay deposits. Based on the characteristics of the site soils and groundwater depth at 13 feet bgs, the Preliminary Geotechnical Investigation determined that there are several layers of potentially liquefiable soil between 13 and 42 feet bgs (Rockridge Geotechnical 2021). The liquefiable soil layers could lead to localized lateral ground deformations and loss of bearing capacity. The Preliminary Geotechnical Investigation includes recommendations related to foundations and settlement, construction considerations, and seismic design to minimize potential impacts related to liquefaction. Furthermore, the Preliminary Geotechnical Investigation recommends the potential for surface manifestations should be further evaluated during the final geotechnical investigation once groundwater levels are better characterized. The Project would conduct a final geotechnical investigation and implement the recommendations to address potential impacts related to liquefaction as required by General Plan Update Policies S-2.2, S-2.3, and S-2.4.

Additionally, the Project would be required to comply with the latest edition of the CBC to ensure that the Project is designed and engineered to address potential impacts related to liquefaction. Therefore, impacts related to liquefaction would be less than significant.

Level of Significance Before Mitigation
Less Than Significant Impact.

Mitigation Measures
No mitigation is necessary.

Level of Significance After Mitigation
Less Than Significant Impact.

Impact GEO-4	**Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?**

Impact Analysis
As discussed in the General Plan Update EIR, structural damage may occur if the expansive potential of soils is not considered during the design and construction of all improvements. As future development and infrastructure projects are considered by the City, each project will be evaluated for conformance with the CBC, General Plan, Zoning Ordinance, and other applicable regulations. Additionally, the CBC requires that a site-specific geotechnical investigation is conducted to determine potential for damage related to expansive soils. The design criteria and specifications set forth in the design-level geotechnical investigation would ensure impacts from problematic soils are minimized. Therefore, the General Plan Update EIR determined impacts related to expansive soil would be less than significant (City of Manteca 2022a).

The Preliminary Geotechnical Investigation did not identify expansive soils at the Project site (Rockridge Geotechnical 2021). The Project would conduct a final geotechnical investigation and implement the recommendations to address potential impacts related to expansive soils as required by General Plan Update Policies S-2.2, S-2.3, and S-2.4. Additionally, the Project would comply with the CBC design criteria and standards to ensure that the Project is designed and engineered to address expansive soils. Therefore, impacts related to expansive soils would be less than significant.

Level of Significance Before Mitigation
Less Than Significant Impact.

Mitigation Measures
No mitigation is necessary.

Level of Significance After Mitigation
Less Than Significant Impact.

Impact GEO-5	**Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?**

Impact Analysis
The Project would connect to and be served by the City's existing sanitary sewer system and would not require the installation of septic tanks or alternative wastewater disposal systems. Therefore, no impact would occur.

Level of Significance Before Mitigation
No Impact.

Mitigation Measures
No mitigation is necessary.

Level of Significance After Mitigation
No Impact.

Impact GEO-6	**Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?**

Impact Analysis
The Project site is vacant and does not contain any known unique paleontological resource or unique geologic feature. It is possible that undiscovered paleontological resources could be encountered during ground-disturbing activities associated with construction of the Project and could result in a significant impact if the undiscovered paleontological resource is damaged. In the event an undiscovered paleontological resource is encountered during construction activities, the Project would comply with General Plan Update Action RC-10j, which requires all new development, infrastructure, and other ground-disturbing projects to comply with the following conditions in the event of an inadvertent discovery of cultural resources or human remains:

- *If construction or grading activities result in the discovery of significant historic or prehistoric archaeological artifacts or unique paleontological resources, all work within 100 feet of the discovery shall cease, the Community Development Director shall be notified, the resources shall be examined by a qualified archaeologist, paleontologist, or historian for appropriate protection and preservation measures; and work may only resume when appropriate protections are in place and have been approved by the Community Development Director; and*
- *If human remains are discovered during any ground disturbing activity, work shall stop until the Community Development Director and the San Joaquin County Coroner have been contacted; if the human remains are determined to be of Native American origin, the Native American Heritage Commission and the most likely descendants have been consulted; and work may only resume when appropriate measures have been taken and approved by the Community Development Director.*

Implementation of General Plan Update Action RC-10j would ensure steps would be taken to reduce impacts to paleontological resources in the event that they are discovered during construction. As such, the Project would not directly or indirectly destroy a unique paleontological resource or geologic feature, and impacts would be less than significant.

Level of Significance Before Mitigation
Less Than Significant Impact.

Mitigation Measures
No mitigation is necessary.

Level of Significance After Mitigation
Less Than Significant Impact.

3.8 GREENHOUSE GASES

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

3.8.1 Environmental Setting

To fully understand global climate change, it is important to recognize the naturally occurring "greenhouse effect" and to define the GHGs that contribute to this phenomenon. Various gases in the earth's atmosphere, classified as atmospheric GHGs, play a critical role in determining the earth's surface temperature. Solar radiation enters the earth's atmosphere from space and a portion of the radiation is absorbed by the earth's surface. The earth emits this radiation back toward space, but the properties of the radiation change from high-frequency solar radiation to lower-frequency infrared radiation. GHGs, which are transparent to solar radiation, are effective in absorbing infrared radiation. As a result, this radiation that otherwise would have escaped back into space is now retained, resulting in a warming of the atmosphere. This phenomenon is known as the greenhouse effect.

Greenhouse Gases

GHGs and climate change are cumulative global issues. CARB and the Cal EPAH regulate GHG emissions within the State of California and the U.S., respectively. While CARB has the primary regulatory responsibility within California for GHG emissions, local agencies can also adopt policies for GHG emission reductions.

Many chemical compounds in the earth's atmosphere act as GHGs, as they absorb and emit radiation within the thermal infrared range. When radiation from the sun reaches the Earth's surface, some of it is reflected back into the atmosphere as infrared radiation (heat). GHGs absorb this infrared radiation and trap the heat in the atmosphere. Over time, the amount of energy from the sun to the Earth's surface should be approximately equal to the amount of energy radiated back into space, leaving the temperature of the earth's surface roughly constant. Many gases exhibit these "greenhouse" properties. Some of them occur in nature (water vapor, carbon dioxide [CO_2], methane [CH_4], and nitrous oxide [N_2O]), while others are exclusively human made (like gases used for aerosols).

The principal climate change gases resulting from human activity that enter and accumulate in the atmosphere are listed below:

- **Carbon Dioxide.** CO_2 enters the atmosphere through the burning of fossil fuels (oil, natural gas, and coal), solid waste, trees and wood products, and chemical reactions (e.g., the manufacture of cement). CO_2 is also removed from the atmosphere (or "sequestered") when it is absorbed by plants as part of the biological carbon cycle.

- **Methane.** CH_4 is emitted during the production and transport of coal, natural gas, and oil. CH_4 emissions also result from livestock and agricultural practices and the decay of organic waste in municipal solid waste landfills, raising livestock, natural gas and petroleum systems, stationary and mobile combustion, and wastewater treatment.

- **Nitrous Oxide.** N_2O is emitted during agricultural and industrial activities as well as during combustion of fossil fuels and solid waste. N_2O emissions from motor vehicles generally occur directly from operation of vehicles.

- **Hydrofluorocarbons (HFC).** HFCs are one of several high global warming potential (GWP) gases that are not naturally occurring and are generated from industrial processes. HFC (refrigerant) emissions from vehicle air conditioning systems occur due to leakage, losses during recharging, or release from scrapping vehicles at end of their useful life.

- **Perfluorocarbons (PFC).** PFCs are another high GWP gas that are not naturally occurring and are generated in a variety of industrial processes.

- **Sulfur Hexafluoride (SF_6).** SF_6 is another high GWP gas that is not naturally occurring and is generated in a variety of industrial processes.

Sources of Greenhouse Gas Emissions

On a global scale, GHG emissions are predominantly associated with activities related to energy production; changes in land use, such as deforestation and land clearing; industrial sources; agricultural activities; transportation; waste and wastewater generation; and commercial and residential land uses. World-wide, energy production including the burning of coal, natural gas, and oil for electricity and heat is the largest single source of global GHG emissions.

In 2019, GHG emissions within California totaled 418.1 million metric tons (MMT) of CO_2e. Similar to national emissions, in California the transportation sector is the largest contributor. Transportation emissions account for approximately 41 percent of the total statewide GHG emissions. The majority of transportation emissions are derived from passenger vehicles and heavy-duty trucks. Emissions associated with industrial uses are the second largest contributor, totaling roughly 24 percent. Industrial emissions are driven by fuel combustion from sources that include refineries, oil and gas extraction, cement plants, and the portion of cogeneration emissions attribution to thermal energy output. Electricity generation (in state and imports) totaled roughly 14 percent. Emissions from the electricity generation sector have declined over the years due to the increase in renewable generation that continue to replace fossil power (CARB 2021).

Potential Environmental Impacts

There are uncertainties as to exactly what the climate changes will be in various local areas of the earth. There are also uncertainties associated with the magnitude and timing of other consequences of a

warmer planet: sea level rise, spread of certain diseases out of their usual geographic range, the effect on agricultural production, water supply, sustainability of ecosystems, increased strength and frequency of storms, extreme heat events, increased air pollution episodes, and the consequence of these effects on the economy.

Within California, climate changes would likely alter the ecological characteristics of many ecosystems throughout the state. Such alterations would likely include increases in surface temperatures and changes in the form, timing, and intensity of precipitation. For instance, historical records are depicting an increasing trend toward earlier snowmelt in the Sierra Nevada. This snowpack is a principal supply of water for the state, providing roughly 50 percent of state's annual runoff. If this trend continues, some areas of the state may experience an increased danger of floods during the winter months and possible exhaustion of the snowpack during spring and summer months. An earlier snowmelt would also impact the state's energy resources. An early exhaustion of the Sierra snowpack may force electricity producers to switch to more costly or non-renewable forms of electricity generation during spring and summer months. A changing climate may also impact agricultural crop yields, coastal structures, and biodiversity. As a result, resultant changes in climate will likely have detrimental effects on some of California's largest industries, including agriculture, wine, tourism, skiing, recreational and commercial fishing, and forestry.

Regulatory Requirements

California has adopted statewide legislation addressing various aspects of climate change and GHG emissions mitigation. Much of this legislation establishes a broad framework for the state's long-term GHG reduction and climate change adaptation program. The governor has also issued several executive orders (EOs) related to the state's evolving climate change policy. Of particular importance are AB 32 and SB 375, which outline the state's GHG reduction goals of achieving 1990 emissions levels by 2020 and a 40 percent reduction below 1990 emissions levels by 2030.

In the absence of federal regulations, control of GHGs is generally regulated at the state level and is typically approached by setting emission reduction targets for existing sources of GHGs, setting policies to promote renewable energy and increase energy efficiency, and developing statewide action plans.

The City of Manteca prepared a CAP in 2013 as the primary strategy for ensuring that the buildout of the Manteca General Plan supports the goals of AB 32. Achieving AB 32 GHG reduction requirements would require the City to reduce emissions by 21.7 percent. Applying the 21.7 percent reduction to the City's overall 2020 business as usual (BAU) would result in a target reduction for the City of 429,693 $MTCO_2e$ per year or 4.91 $MTCO_2e$ 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, the CAP requires development projects to achieve GHG emissions reductions by taking the following actions (City of Manteca 2013):

- 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 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 City of Manteca is preparing an update to the 2013 CAP; however, the updated CAP has not yet been adopted.

3.8.2 Previous Environmental Analysis

City of Manteca General Plan Update EIR

The General Plan Update EIR determined that future development would generate GHGs that would contribute to climate change; however, impacts would be less than significant with implementation of General Plan Update policies and actions, as well as federal and State regulations. Additionally, future development projects under the General Plan Update would be required to comply with the Manteca CAP and would not conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs. Therefore, the General Plan Update EIR determined impacts related to GHGs would be less than significant (City of Manteca 2022a).

3.8.3 Project-Specific Impact Analysis

The Project would result in both short- and long-term emissions of GHGs. Construction emissions would be generated from the exhaust of equipment, the exhaust of construction hauling trips, and worker commuter trips. Long-term, operational GHG emissions would result from vehicular traffic, operation of any landscaping equipment, offsite generation of electrical power over the life of the Project, the energy required to convey water to and wastewater from the Project site, the emissions associated with the hauling and disposal of solid waste from the Project site, and any fugitive refrigerants from air conditioning or refrigerators.

Construction and operational emissions were estimated using CalEEMod (version 2020.4.0). CalEEMod is a statewide land use emissions computer model designed to provide a uniform platform for government agencies, land use planners, and environmental professionals to quantify potential criteria pollutant and GHG emissions associated with both construction and operation of a variety of land use projects. The model quantifies direct emissions from construction and operations (including vehicle use), as well as indirect emissions, such as GHG emissions from energy use, solid waste disposal, vegetation planting and/or removal, and water use. Modeling input parameters are detailed in Appendix B.

GHG emissions from operation are disclosed under Impact GHG-1, however, consistent with SJVAPCD guidance, Project significance is based on compliance with the City of Manteca's CAP and CARB's 2017 and 2022 Scoping Plans.

The SJVAPCD's Guidance for Valley Land-use Agencies in Addressing GHG Emission Impacts for New Projects under CEQA presents a tiered approach to analyzing project significance with respect to GHG emissions. Project GHG emissions are considered less than significant if they can meet any of the following conditions, evaluated in the order presented:

- Project is exempt from CEQA requirements.
- Project complies with an approved GHG emission reduction plan or GHG mitigation program.
- Project implements Best Performance Standards.
- Project demonstrates that specific GHG emissions would be reduced or mitigated by at least 29 percent compared to BAU, including GHG emission reductions achieved since the 2002-2004 baseline period.

On November 20, 2015, the California Supreme Court (Court) issued its decision on the Center for Biological Diversity v. California Department of Fish and Wildlife on the Newhall Ranch Project case. The Court determined that there is not substantial evidence to link a specific project's achievement of CARB's Scoping Plan's statewide average reduction below BAU to the conclusion that the project's reduction would meet AB 32's 2020 goals. Furthermore, since the release of SJVAPCD's guidance, SB 32 has been issued that requires the state to further reduce GHG emissions beyond the goals laid out in AB 32. As a result, the 29 percent reduction in emissions as compared to a BAU standard are outdated and were not used for this analysis.

Project Threshold

The City of Manteca prepared a CAP in 2013 to comply with AB 32 GHG reductions. While the CAP is outdated, it provides relevant GHG reduction strategies for individual projects and the Project is required to demonstrate compliance. In addition, the Project would be required to comply with a series of state and regional GHG reduction plans, including CARB's 2017 and 2022 Scoping Plans and SJVAPCD's Climate Change Action Plan (CCAP) Measures. These plans include approved GHG emission reduction plans, and therefore projects consistent with these plans would also comply with SB 32. As SJVAPCD does not have a quantifiable emissions threshold, Project significance was determined based on compliance with applicable plans to reduce GHG emissions in accordance with CEQA Guidelines 15064.4(b)(3).

Impact GHG-1	**Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?**

Impact Analysis

Construction Emission Inventory

Construction GHGs would be emitted by the off-road construction equipment and vehicle travel by workers and material deliveries to the Project site. The estimated construction GHG emissions are shown in Table 3.8-1. Because construction GHG emissions are temporary and reduction measures are limited, a common professional practice is to amortize the construction emissions over the life of the Project. A residential project is conservatively assumed to have a life of 30 years.

Table 3.8-1: Construction Greenhouse Gas Emissions

Construction Year	MTCO2e
Pre-construction Utility Work	
2025	194
Phase A – Duplex Construction and Single-Family Construction	
2025	731
2026	582
2027	459
Phase B – Multi-Family Construction	
2025	698
2026	994
2027	942
2028	495
Offsite Roadway Improvements	
2026	584
Total	**5,679**
Amortized over 30 years[1]	189.3

Notes:

[1] GHG emissions are amortized over the 30-year life of the proposed project.

Source: Stantec 2024

Operational Emission Inventory

Operational or long-term emissions occur over the life of the Project. Sources of emissions may include motor vehicles and trucks, energy usage, water usage, waste generation, and area sources, such as landscaping activities and residential woodburning. Operational GHG emissions associated with the Project were estimated using CalEEMod 2020.4.0 and are shown in Table 3.8-2.

Table 3.8-2: Operational Greenhouse Gas Emissions

Source	Emissions (MTCO2e per year)
Phase A – Duplex Construction and Single-Family Construction	
Area	92.6
Energy	114
Mobile	1,722
Waste	13.1
Water	13.8
Refrigerants	0.29
Subtotal	1,980
Phase B – Multi-Family Construction	
Area	426
Energy	357
Mobile	5,160
Waste	155
Water	45.6
Refrigeration	0.76
Subtotal	6,145
Amortized Construction Emissions	189
Total	**8,314**

Source: Stantec 2024

Offsite roadway improvements would not generate any operational emissions.

The Project's GHG impact is determined by its consistency with applicable local, statewide, and regional GHG reduction plans. As shown in Impact GHG-2, the Project would be consistent with the City's CAP, CARB's 2017 and 2022 Scoping Plans, and SJCOG 2022 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) goals to reduce GHG emissions, as such the Project would comply with applicable reduction plans and GHG emissions are less than significant.

Level of Significance Before Mitigation
Less Than Significant Impact.

Mitigation Measures
No mitigation is necessary.

Level of Significance After Mitigation
Less Than Significant Impact.

Impact GHG-2	**Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?**

Impact Analysis
The Project would have a significant impact with respect to GHG emissions and global climate change if it would substantially conflict with the provisions of Section 15064.4(b) of the CEQA Guidelines.

Pursuant to Appendix G of the CEQA Guidelines, a significant GHG impact is identified if the project could conflict with applicable GHG reduction plans, policies, or regulations. Development projects would be subject to complying with the City's CAP, the SJCOG 2022 RTP/SCS as well as SB 32. SB 32 is a statewide reduction goal aimed at reducing emissions to 40 percent below 1990 levels by 2030. CARB's 2017 Scoping Plan sets a framework for the State to meet the reduction targets of SB 32. The Project was also compared to CARB's 2022 Scoping Plan that builds upon the 2017 Scoping Plan to meet SB 32 and AB 1279 goals.

City of Manteca's Climate Action Plan

The City's CAP is intended to support the goals of AB 32 and requires new development projects within the City to achieve GHG emissions reductions by implementation of specific reduction strategies. Table 3.8-3 identifies the CAP strategies applicable to the Project. As shown, the Project would be consistent with the CAP.

Table 3.8-3: Project Consistency with City of Manteca's Climate Action Plan

CAP Strategy	Consistency Discussion
Comply with the applicable land use, sustainable development, and resource conservation policies of the Manteca General Plan.	**Consistent.** The Project is requesting a General Plan Amendment to re-designate the northwestern portion of the Project site as HDR for the proposed multi-family and two-family homes, and the northeastern and southern portions of the Project site as LDR for the single-family uses. The Project is also requesting to rezone the northwestern portion of the Project site to R-3 for the multi-family and two-family homes, and the northeastern and southern portions of the Project site to R-1 for the single-family uses. The Project would be consistent with General Plan Policy LU-3.1 which states, "Provide for the development of a variety of housing types and at a range of prices to meet the needs of all segments of the city's population, including individuals and families who qualify for affordable housing assistance in accordance with the housing element." Furthermore, the City is also under obligation to achieve its allocation of new housing under the

CAP Strategy	Consistency Discussion
	Regional Housing Needs Assessment, which is updated every eight years. According to SJCOG, the City of Manteca would be required to add 8,306 additional housing units from June 2023 to December 3031.[1] As the Project would provide additional residential units to the City of Manteca's housing stock, it would be consistent with the overall goals and requirements of the city. Therefore, while the Project may require a General Plan Amendment and rezone, the Project would be consistent with the land uses identified in the General Plan Update. The Project would also be consistent with the General Plan's sustainability and conservation policies.
Construct project transportation infrastructure that supports walking, bicycling, and transit use.	**Consistent.** Project construction would include the development of pedestrian accessible sidewalks throughout the site. In addition, the Project would provide a bus stop on E. Atherton Drive and extend a Class I bicycle path along the northern frontage of E. Atherton Drive. The bicycle path extension would follow the City's standards for a 12-foot Class I bicycle path.
Implement Transportation Demand Management (TDM) programs in projects with large numbers of employees.	**Not Applicable.** The Project is a residential development that would only include 11 onsite employees. Therefore, the strategy is not applicable to the Project. Implementation of the Project would not interfere with implementation of this strategy.
Design and construct project buildings to exceed Title 24 Energy Efficiency Standards by at least 10 percent.	**Consistent.** 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 2024 Energy Efficiency Standards are 10 percent more efficient than the 2010 standards. Moreover, the Project would be designed in accordance with CalGreen Tier 1 standards. Solar panels would also be placed on the roofs of the single-family homes and on the covered parking spaces for the multi-family component, which would offset some of the site's energy demands. Therefore, energy efficiency would exceed Title 24 energy efficiency standards beyond the CAP goal set for 2013 standards.
Implement project buildings including water conservation measures that meet or exceeds water conservation standards of the City's adopted landscaping ordinance 20 percent reduction requirement.	**Consistent.** The Project would be required to meet the water efficiency regulations within the CalGreen Code. As such, the 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.	**Consistent.** Landscaping within the Project site would be required to comply with the CalGreen Code, and all water efficiency measures therein, including the Model Water Efficient Landscape Ordinance. In addition, the Project would be required to comply with the adopted water conservation standards set forth in Chapter 17.48 of the Manteca Municipal Code. As such, the Project would comply with this measure.
Develop programs to exceed state recycle and diversion targets by at least 10 percent.	**Consistent.** Pursuant to Municipal Code Section 13.02.120, all construction materials associated with the Project shall be recycled.

CAP Strategy	Consistency Discussion
	Pursuant to Municipal Code Section 13.02.090, owners of multi-family complexes are to utilize Manteca's recycling service and allow for the convenient location of recycling containers. During operation, the Project would include three-stream waste management facilities which distribute solid waste by kitchen organics, recyclables, and garbage. The site would be serviced by a solid waste disposal company (Manteca Public Works Department, Solid Waste Diversion) that is subject to the California Integrated Waste Management Act (AB 939) and AB 341. AB 341 set a goal that not less than 75% of solid waste be source reduced, recycled, or composted by the year 2020. Moreover, after the release of the City's CAP in 2013, the state passed SB 1383 (in 2016) that aimed to reduce organic waste landfill disposal by 75% from 2014 levels by 2025 and beginning in January 2022, residences and businesses are required to sort and separate collected food scraps, yard debris and food soiled paper from trach and recycling services and subscribe to an organic waste collection service. The Manteca Public Works Department, Solid Waste Diversion also has a waste to fuel program that aims to divert recoverable non-cellulose organic waste produced in the City from landfill disposal towards biologically generated, carbon negative transportation fuel. Therefore, statewide programs developed after CAP approval, local programs, and the site's three-stream waste system would reduce waste and diversion beyond the CAP goal set for 2013 standards.

Notes:

[1] SJCOG. 2022a.

Source of Measures: City of Manteca 2013

Source of Consistency Determination: Stantec Consulting Services Inc 2022

Consistency with CARB's Scoping Plan

CARB issued the Final 2017 Scoping Plan Update in November 2017 and establishes emissions reduction strategies necessary to meet SB 32's 2030 reduction goals. Table 3.8-4 identifies the Scoping Plan policies that are applicable to the Project. As shown, the Project would be consistent with the 2017 Scoping Plan.

Table 3.8-4: Project Consistency with Applicable 2017 Scoping Plan Greenhouse Gas Reduction Strategies

Measure Name	Measure Description	Consistency Determination
SB 350 50% Renewable Mandate.	Utilities subject to the legislation will be required to increase their renewable energy mix from 33% in 2020 to 50% in 2030.	**Consistent.** The Project would purchase electricity from a utility subject to the SB 350 Renewable Mandate. In addition, the Project would provide solar panels on the roofs of the single-family homes and on the covered parking spaces for the multi-family component. The solar panels provided for the multi-family component would supply approximately 90% of the energy required for the multi-family homes. Solar panels provided by the single-family homes would also offset some of the Project's energy demands.
Low Carbon Fuel Standard	This measure requires fuel providers to meet an 18% reduction in carbon content by 2030.	**Consistent.** Vehicles accessing the Project site would use fuel containing lower carbon content as the fuel standard is implemented.
Mobile Source Strategy (Cleaner Technology and Fuels Scenario)	Vehicle manufacturers will be required to meet existing regulations mandated by the LEV III and Heavy-Duty Vehicle programs. The strategy includes a goal of having 4.2 million zero-emission vehicles (ZEVs) on the road by 2030 and increasing numbers of ZEV trucks and buses.	**Consistent.** Future residents can be expected to purchase increasing numbers of more fuel efficient and zero emission cars and trucks each year. The Project would provide 1,437 parking spaces, of which 262 would be EV spaces per CalGreen requirements. Of the 262 EV spaces, 58 EV spaces would be fully functional on Day 1 of operation and 204 EV spaces would be pre-wired for future use. Moreover, home deliveries would be made by increasing numbers of zero-emission delivery trucks.
Short-Lived Climate Pollutant (SLCP) Reduction Strategy	The strategy requires the reduction of SLCPs by 40 percent from 2013 levels by 2030 and the reduction of black carbon by 50 percent from 2013 levels by 2030.	**Consistent.** SJVAPCD limits wood burning devices in new homes. Therefore, the Project would not generate black carbon.
SB 375 Sustainable Communities Strategies	Requires Regional Transportation Plans to include a sustainable communities' strategy for reduction of per capita vehicle miles traveled.	**Consistent.** The Project proposes to extend a Class I bicycle path along the northern frontage E. Atherton Drive, provide a total of 336 bicycle parking spaces, and construct a new bus stop on E. Atherton Drive. In addition, the Project site is situated near existing bus stops including W. Woodward Ave at Laurie Avenue that serves Manteca Transit Route 4 and E. Atherton Drive at Van Ryan Avenue that serves Manteca Transit Route 2.

Measure Name	Measure Description	Consistency Determination
Post-2020 Cap-and-Trade Program	The Post 2020 Cap-and-Trade Program continues the existing program for another 10 years. The Cap-and-Trade Program applies to large industrial sources such as power plants, refineries, and cement manufacturers.	**Consistent.** The post-2020 Cap-and-Trade Program indirectly affects people who use the products and services produced by the regulated industrial sources when increased cost of products or services (such as electricity and fuel) are transferred to the consumers. The Cap-and-Trade Program covers the GHG emissions associated with electricity consumed in California, whether generated in-state or imported. Accordingly, GHG emissions associated with CEQA projects' electricity usage are covered by the Cap- and-Trade Program. The Cap-and-Trade Program also covers fuel suppliers (natural gas and propane fuel providers, and transportation fuel providers) to address emissions from such fuels and from combustion of other fossil fuels not directly covered at large sources in the program's first compliance period.

Source of Measures: CARB 2017

Source of Consistency Determination: Stantec Consulting Services Inc. 2022

Based on this evaluation, this analysis finds the Project would be consistent with all feasible and applicable strategies recommended in the 2017 Scoping Plan Update.

Consistency with the 2022 Scoping Plan

CARB approved the 2022 Scoping Plan in December 2022. The 2022 Scoping Plan builds upon previous iterations of state scoping plans to achieve carbon neutrality and reduce anthropogenic GHG emissions below 85 percent below 1990 no later than 2045, as directed by AB 1279. Table 3.8-5 identifies the Scoping Plan policies that are applicable to the Project. As shown, the Project would be consistent with the 2022 Scoping Plan.

Table 3.8-5: Project Consistency with 2022 Scoping Plan Greenhouse Gas Reduction Strategies

Measure	Consistency Determination
Deploy ZEVs and reduce driving demand	**Consistent.** The Project would place new residents in an existing urban area. The Project would encourage the use of electric vehicles by including 262 EV spaces (58 fully functional and 204 pre-wired spaces). The Project also proposes to extend a Class I bicycle path along the northern frontage E. Atherton Drive, provide a total of 336 bicycle parking spaces, and construct a new bus stop on E. Atherton Drive. These Project features would encourage alternative forms of transportation which would reduce driving demand.
Coordinate supply of liquid fossil fuels with declining CA fuel demand	**Not Applicable.** This measure is aimed at petroleum refineries and fossil fuel extraction operations. The Project would not interfere with this goal. Moreover, the Project would be 100 percent electric and would not rely on natural gas. The Project would also include 58 EV parking stalls and 204 pre-wired EV parking spaces that would encourage electric vehicles consistent with the state's goal to reduce fuel demand.

Measure	Consistency Determination
Generate clean electricity	**Consistent.** The Project would be required to adhere to the latest CalGreen building standards that require single-family homes to include solar panels. As such the Project would generate clean energy. Moreover, the Project would purchase electricity from utility providers that are expanding GHG free electricity consistent with SB 350 Renewable Mandate.
Decarbonize Buildings	**Consistent.** The Project would comply with the latest CalGreen building standards that require energy and water efficient project design features that would reduce GHG emissions.
Decarbonize Industrial Energy Supply	**Not Applicable.** The Project would not include any industrial land uses.
Reduce non-combustion emissions (Methane)	**Not Applicable.** The Project would not include any land uses that generate significant levels of methane, such as landfills or dairy farms.
Reduce non-combustion emissions (Hydrofluorocarbons [HFCs])	**Consistent.** The Project will comply with all SJVAPCD and state regulations governing SLCPs, including HFCs.
Compensate for remaining emissions	**Not Applicable.** This measure is aimed at the state government to reduce statewide emissions to meet AB 1279 goals.

Source: CARB 2022

Consistency with SJCOG 2022 RTP/SCS

The SJCOG 2022 RTP/SCS includes a series of strategies for long-term transportation planning across San Joaquin County. Implementation of these strategies would also reduce GHG emissions and air quality emissions. Most of these strategies are aimed targeted for regional implementation. However, some of these strategies would also be applicable at the Project-level. The Project's consistency with the applicable measures is included in Table 3.8-6 below. As shown in the table, the Project would be consistent with applicable RTP/SCS measures.

Table 3.8-6: Project Consistency with Applicable SJCOG 2022 RTP/SCS Strategies

RTP/SCS Strategy	Consistency Discussion
Policy: Enhance the Environment for Existing and Future Generations and Conserve Energy.	
Encourage efficient development patterns that maintain agricultural viability and natural resources	**Consistent.** The Project would be constructed in an existing urban environment.
Encourage preservation of natural resources	**Consistent.** The Project would be constructed in an existing urban environment.
Enhance the connection between land use and transportation choices through projects supporting energy and water efficiency.	**Consistent.** The Project would be in compliance with state and local regulations for energy and water efficiency.
Improve air quality by reducing transportation-related emissions	**Consistent.** The Project would upgrade the traffic signals at the intersection of S. Main Street and E. Atherton Drive, and both signals at the north and south intersections of S. Main Street and HWY 120 on- and off-ramps with modern traffic signal controllers. The Project would also extend a Class I bicycle path across the northern frontage of E. Atherton Drive which would follow the City's standards for a 12-foot Class I bicycle path. As such, the Project would reduce air quality emissions by upgrading traffic lights to reduce the amount of time

RTP/SCS Strategy	Consistency Discussion
	cars spend idling and would support bicycle travel in the City.
Policy: Maximize Mobility and Accessibility	
Optimize the public transportation system to provide efficient and convenient access for users of all income levels.	**Not Applicable:** This policy is aimed at SJCOG to provide efficient and convenient access for all income levels. The Project would not interfere with this strategy and would provide a new bus stop at E. Atherton Drive.
Encourage infill development and development near transit, including transit-oriented development to maximize existing transit investments.	**Consistent.** The Project would be constructed in an existing urban environment with residential land uses to the south and east. Additionally, the Project would provide a bus stop at E. Atherton Drive to provide local bus service to the Project site and surrounding uses. The Project site is located approximately 0.5-mile from the Manteca Transit Route 2 bus stops on E. Atherton Road at Tinnin Road west of the site, at Van Ryn Avenue east of the site, as well as the Manteca Transit Route 4 bus stop located on W. Woodward Avenue at Laurie Avenue.
Provide transportation improvements to facilitate non-motorized travel, including the incorporation of complete streets elements as appropriate.	**Consistent.** The Project proposes to extend a Class I bicycle path across the northern frontage of E. Atherton Drive which would follow the City's standards for a 12-foot Class I bicycle path. In addition, the Project would provide a bus stop on E. Atherton Drive.
Policy: Preserve the Efficiency of the Existing Transportation System	
Manage the adoption of electric vehicles and private connected and autonomous vehicles.	**Consistent. T**he Project would include 58 EV parking stalls and 204 pre-wired EV parking spaces that would encourage electric vehicles.
Policy: Improve the Quality of Life of Residents	
Promote a broader range of housing types.	**Consistent.** The Project would construct 672 for rent apartments, 48 for sale two family units, and 98 single-family homes.
Enhance public health through active transportation projects.	**Consistent.** The Project proposes to extend a Class I bicycle path across the northern frontage of E. Atherton Drive which would follow the City's standards for a 12-foot Class I bicycle path.

Source of Measures: SJCOG 2022b.

Conclusion

The Project proposes to construct multi-family and single-family residences in an existing residential community. The Project site is located near existing bus stations for transit and would provide a bus stop on E. Atherton Drive. The Project would also extend a Class I bicycle path that would reduce VMT by single-passenger vehicles. The Project would be required to adhere to the latest Title 24 and California Building Standards and provide solar panels on the roofs of the single-family homes and on the covered parking spaces for the multi-family component. The Project would not conflict with the goals and objectives of the City's CAP, SJCOG 2022 RTP/SCS, CARB's 2017 and 2022 Scoping Plans, or any other State or regional plan, policy, or regulation of an agency adopted for the purpose of reducing GHG emissions. As such, the Project would not conflict with an applicable plan and impacts would be less than significant.

Level of Significance Before Mitigation
Less Than Significant Impact.

Mitigation Measures
No mitigation is necessary.

Level of Significance After Mitigation
Less Than Significant Impact.

3.9 HAZARDS AND HAZARDOUS MATERIALS

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

3.9.1 Environmental Setting

Hazardous materials, as defined by the California Code of Regulations, are substances with certain physical properties that could pose a substantial present or future hazard to human health or the environment when improperly handled, disposed of, or otherwise managed. Hazardous materials are grouped into the following four categories, based on their properties:

- Toxic – Causes Human Health Effects
- Ignitable – Has the Ability to Burn
- Corrosive – Causes Severe Burns or Damage to Materials
- Reactive – Causes Explosions or Generates Toxic Gases

Hazardous waste is any hazardous material that is discarded, abandoned, or slated to be recycled. The criteria that defines a material as hazardous also defines a waste as hazardous. If improperly handled, hazardous materials and hazardous waste can result in public health hazards if released into the soil or groundwater or through airborne releases in vapors, fumes, or dust. Soil and groundwater having concentrations of hazardous constituents higher than specific regulatory levels must be handled and disposed of as hazardous waste when excavated or pumped from an aquifer. California Government Code, Title 22, Sections 66261.20–24 contains technical descriptions of toxic characteristics that could cause soil or groundwater to be classified as hazardous waste.

California Government Code, Section 65962.5 requires the California Environmental Protection Agency to compile, maintain, and update specified lists of hazardous material release sites. CEQA (California PRC Section 21092.6) requires the Lead Agency to consult the lists compiled pursuant to California Government Code, Section 65962.5, to determine whether a project and any alternatives are identified on a federal or State listing database of hazardous material release sites. The lists of hazardous material release sites are commonly referred to as the “Cortese List” after the legislator who authorized the legislation. Because the statute was enacted more than 20 years ago, some of the provisions refer to agency activities that were conducted many years ago and are no longer being implemented and, in some cases, the information required in the Cortese List does not exist. Those requesting a copy of the Cortese List are now referred directly to the appropriate information resources contained on internet websites hosted by the boards or departments referenced in the statute, including the online EnviroStor database from the Department of Toxic Substance Control (DTSC) and the online GeoTracker database offered by the SWRCB. These two databases show hazardous material release sites, along with other categories of sites or facilities specific to each agency’s jurisdiction. The Project site is not listed on either the DTSC EnviroStor database or the SWRCB GeoTracker database (DTSC 2024, SWRCB 2024)

The Project site is approximately 8.2 miles southeast of the Stockton Metropolitan Airport and 8.6 miles northeast of the New Jerusalem Airport. Based on review of Fire Hazard Severity Zone maps developed by the California Department of Forestry and Fire Protection (CAL FIRE), the Project site is not within or near a state responsibility area and does not contain lands classified as a very high fire hazard severity zone (VHFHSZ; CAL FIRE 2024). The United States Forest Service (USFS) has also developed a Wildfire Hazard Potential Map to inform evaluations of wildfire risk and prioritize fuels management across very large landscapes. According to the USFS Wildfire Hazard Potential Map, the risk of wildfire at the Project site and in the surrounding area is low to very low (USFS 2020).

3.9.2 Previous Environmental Analysis

City of Manteca General Plan Update EIR

As identified in the General Plan Update EIR, the General Plan Update includes policies and actions to minimize the potential for impacts associated with hazardous materials. These policies would ensure that potential hazards are identified on a project site, development is located in areas where potential exposure to hazards and hazardous materials can be mitigated to an acceptable level, and all operations comply with federal and State regulations regarding the use, transport, storage, and disposal of hazardous materials. The City does not contain any hazardous materials release sites that are on a list compiled pursuant to Government Code Section 65962.5 (City of Manteca 2022a). Furthermore, the City's Planning Area is not within 2 miles of a public airport or categorized as a VHFHSZ by CAL FIRE. All future projects allowed under the General Plan Update would be required to comply with the provisions of federal, State, and local requirements related to wildland fire hazards. The General Plan Update also includes policies and actions to ensure that the City's emergency access routes, emergency contact lists, and public information regarding designated facilities and routes are regularly reviewed to provide the City and public with up-to-date information in the event of an emergency. As such, the General Plan Update EIR determined impacts related to hazards and hazardous materials would be less than significant with compliance with federal and State regulations as well as General Plan policies and actions (City of Manteca 2022a).

3.9.3 Project-Specific Impact Analysis

Impact HAZ-1	**Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?**
AND	
Impact HAZ-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?**

Impact Analysis

The Project would involve the construction of 818 residential dwelling units which would include 672 multi-family apartments, 48 two-family units, and 98 single-family homes. Construction activities would include grading of the site and the construction of new buildings and associated infrastructure. During the construction phase, limited amounts of hazardous materials would be used, including standard construction materials such as concrete, paints, solvents and heavy construction equipment which would contain diesel fuels and oils and construction activities could potentially cause accidental spills or releases of hazardous materials. As part of the NPDES Construction General Permit, the Project would be required to prepare and implement a SWPPP that would include BMPs to prevent accidental spills of hazardous materials during construction. With adherence to applicable federal, state, and local regulations, and implementations of BMPs in the SWPPP, the impact to the public or environment from use or accidental release of hazardous materials during Project construction would be reduced. Impacts related to the routine transport, use, and disposal or accidental release of hazardous materials during Project construction would be less than significant.

During operation of the Project, the use of hazardous materials would be limited to those commonly found at residential facilities such as solvents, cleaners, paints; chlorine and other chemicals for pool maintenance; and pesticides for landscape maintenance activities. These common household hazardous materials would be used in limited quantities and would not create a substantial hazard to the public or the environment. Therefore, impacts related to the routine transport, use, and disposal or accidental release of hazardous materials during Project operation would be less than significant.

Level of Significance Before Mitigation
Less Than Significant Impact.

Mitigation Measures
No mitigation is necessary.

Level of Significance After Mitigation
Less Than Significant Impact.

Impact HAZ-3	**Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?**

Impact Analysis
The closest school to the Project site is Walter Woodward Elementary School, which is located approximately 0.6-mile to the south. As discussed under Impacts (a) and (b) above, Project construction would include handling of typical quantities of hazardous materials such as fuels, lubricants, and paints; however, this is not anticipated to pose a significant risk to students attending the school because the regulations and BMPs designed to protect construction workers handling such materials would protect any nearby students and sensitive receptors on adjacent sites. The quantity and type of hazardous materials used during construction of the Project would not result in significant impacts to students. Additionally, hazardous materials used during operation of the Project would be limited to commonly found household hazardous materials. Therefore, the Project would not emit hazardous emissions or handle hazardous materials, substances, or waste within 0.25-mile of an existing or proposed school and there would be no impact.

Level of Significance Before Mitigation
No Impact.

Mitigation Measures
No mitigation is necessary.

Level of Significance After Mitigation
No Impact.

Impact HAZ-4	**Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?**

Impact Analysis
According to the SWRCB GeoTracker website and the DTSC EnviroStor website, the Project site is not located on a site that is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 (SWRCB 2024, DTSC 2024). Therefore, there would be no impact.

Level of Significance Before Mitigation
No Impact.

Mitigation Measures
No mitigation is necessary.

Level of Significance After Mitigation
No Impact.

Impact HAZ-5	**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?**

Impact Analysis
The Project site is approximately 8.2 miles southeast of the Stockton Metropolitan Airport and approximately 8.6 miles northeast of the New Jerusalem Airport. The Project site is not located within the airport influence area for the Stockton Metropolitan Airport or the airport influence area for the New Jerusalem Airport. Therefore, the Project would not result in a safety hazard or excessive noise for people residing or working in the Project area and there would be no impact.

Level of Significance Before Mitigation
No Impact.

Mitigation Measures
No mitigation is necessary.

Level of Significance After Mitigation
No Impact.

Impact HAZ-6	**Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?**

Impact Analysis
The San Joaquin County Office of Emergency Services (OES) maintains an Emergency Operations Plan (EOP) that serves as the official Emergency Plan for San Joaquin County. The City does not have designated evacuation routes. The Project would comply with the provisions of the San Joaquin County EOP and would not impair implementation of or interfere with the plan.

The Project would not modify any existing roadways in such a way that would impede emergency access or evacuation. Project implementation would result in the provision of new or widened roads to provide access to the Project site. Primary site access to the new developments would be through the abandoned but existing Quintal Road, located off S. Main Street and two new commercial roads located off E. Atherton Drive that would be constructed for the Project. The Project would include three other access points for fire access to the site. Access points to the Project site would meet the City's requirements for fire apparatus access as well as emergency ingress and egress from the Project site. EVA access to the Project site has been provided, consistent with the Fire Marshall's requirements. The Planning Commission and City engineer would review proposed residential street patterns to evaluate the accessibility for fire engines and emergency response to ensure that the Project has adequate ingress and egress, setbacks, clearances, turning radii, etc. and does not impede emergency access. Therefore, the Project would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan and the impact would be less than significant.

Level of Significance Before Mitigation
Less Than Significant Impact.

Mitigation Measures
No mitigation is necessary.

Level of Significance After Mitigation
Less Than Significant Impact.

Impact HAZ-7	**Expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires?**

Impact Analysis
The Project site and the adjacent areas are not located within a State Responsibility Area (SRA) or within a VHFHSZ as designated by CAL FIRE (CAL FIRE 2024). The USFS Wildfire Hazard Potential Map identifies the Project site as non-burnable and very low wildfire hazard potential (USFS 2020). The Project would be required to implement California Fire Code requirements and City standards, such as the use of automatic sprinkler systems and fire hydrants, to reduce the potential for fires. Additionally, the Project would comply with General Plan Policies CF-3.4, CF-3.5, and CF-3.6 that are aimed at maintaining roadways to provide adequate emergency access, complying with the requirements of the California Fire Code, and providing adequate water volumes and water pressure for fire protection. With compliance with the California Fire Code requirements and City standards, including policies and actions from the General Plan Update, the Project would not expose people or structures to significant risk of loss, injury or death involving wildland fires and the impact would be less than significant.

Level of Significance Before Mitigation
Less Than Significant Impact.

Mitigation Measures
No mitigation is necessary.

Level of Significance After Mitigation
Less Than Significant Impact.

3.10 HYDROLOGY AND WATER QUALITY

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

3.10.1 Environmental Setting

Watershed and Regional Drainage

San Joaquin County is located in the San Joaquin River Hydrological Region. Within the San Joaquin River Hydrological Region, the City's Planning Area is located in the Lower Lone Tree Creek, Middle Lone Tree Creek, Oakwood Lake-San Joaquin River, Town of French Camp-San Joaquin River, Walker Slough-French Camp Slough, and Walthall Slough-San Joaquin River watersheds. The San Joaquin River is the principal river of the region, and all other streams of the region are tributary to it. The entire San Joaquin River system drains northwesterly through the Delta to Suisun Bay (City of Manteca 2022a).

Groundwater

The City of Manteca is located in the Eastern San Joaquin Groundwater Subbasin. The Groundwater Sustainability Plan was prepared for the Eastern San Joaquin Groundwater Subbasin in November 2019. According to Department of Water Resources Bulletin 118, the groundwater basin is critically overdrafted, with historical declines averaging 1.7 feet per year. Past estimates of safe groundwater yield from the basin have indicated that pumping at or below 1-acre feet per year (AFY) per acre of City land is sustainable. The City targets this sustainable yield, but the total groundwater pumping occurring within City boundaries includes City-owned municipal and park irrigation wells, as well as irrigation and domestic wells owned and operated by others. In 2015, the City's annual groundwater production was 7,249 AFY, of which 5,639 AFY was for potable use and 1,610 AFY for irrigation use (City of Manteca 2022a).

During the Preliminary Geotechnical Investigation, the depth to groundwater was about 19.6 to 24.2 feet bgs. Rockridge Geotechnical also reviewed historic groundwater data from other sites near the Project site, which indicated groundwater levels range from 13 to 15 bgs. Based on the groundwater level data measured at the site and the review of historic groundwater data, the Preliminary Geotechnical Investigation concluded a groundwater depth of 13 feet bgs should be used for planning purposes (Rockridge Geotechnical 2021).

Flooding

Flood hazard zones are identified on official Flood Insurance Rate Maps (FIRM) issued by the Federal Emergency Management Agency (FEMA). The Project site is designated as Zone X according to FIRM #06077C0640F (FEMA 2024). Zone X are areas with minimal flood hazards.

3.10.2 Previous Environmental Analysis

City of Manteca General Plan Update EIR

As discussed in the General Plan Update EIR, future construction activities could temporarily increase runoff, erosion, and sedimentation. However, the General Plan Update includes policies to maximize stormwater quality and infiltration to ensure offsite runoff is not increased during rain and flood events. Existing regulatory requirements that manage water quality include requirements to obtain approval from the Central Valley RWQCB for NPDES permits, other discharge permits, SWPPPs, and to implement BMPs. These regulatory requirements are intended to ensure that water quality does not degrade to levels that would violate water quality standards.

Additionally, the General Plan Update EIR includes policies and actions consistent with the Eastern San Joaquin Groundwater Subbasin Groundwater Sustainability Plan. The General Plan Update EIR determined that future buildout of the General Plan Update would not appreciably add to the volume of impervious surfaces in Manteca, when compared to the overall size of the regional groundwater basin recharge area, and that there are adequate water supplies (including groundwater) to serve the projected buildout demand of the General Plan Update.

The City is not identified within a tsunami inundation zone. The General Plan Update EIR identifies that the large-scale damage from seiches could come from downstream flooding that would be caused by large volumes of water overtopping a dam or reservoir. The City has the potential to be inundated by four

dams: Tulloch Dam, San Luis Dam, New Exchequer Dam (Lake McClure), and New Melones Dam. The California Department of Water Resources, Division of Safety of Dams (DSD) is responsible for inspecting and monitoring these dams. Regular inspection by DSD and maintenance by the dam owners ensure that the dams are kept in safe operating condition. As such, the General Plan Update EIR determined failure of these dams is considered to have an extremely low probability of occurring and is not considered to be a reasonably foreseeable event (City of Manteca 2022a). With the implementation of existing regulatory requirements and compliance with the General Plan Update policies and actions, the General Plan Update EIR determined water quality impacts would be less than significant (City of Manteca 2002a).

3.10.3 Project-Specific Impact Analysis

Impact HYD-1	**Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?**

Impact Analysis

Construction activities associated with the Project would involve vegetation removal, grading, and excavation activities that could expose barren soils to sources of wind or water, resulting in the potential for erosion and sedimentation on and off the Project site resulting in degradation of water quality. Additionally, construction activities would have the potential to generate polluted runoff into the City's storm drain system. As required by the City for individual projects that disturb more than 1 acre, the Project would be required to obtain a NPDES Construction General Permit and prepare and implement a SWPPP that includes BMPs to control the discharge of pollutants in stormwater during construction, consistent with Chapter 13.28, Storm Water Management and Discharges, of the Manteca Municipal Code. Preparation and implementation of a SWPPP, consistent with the RWQCB's requirements, would ensure that Project construction would not violate any water quality standards or waste discharge requirements.

Development of the Project would result in increased stormwater and pollutant runoff from the site post-construction due to development of impervious surfaces at the site. This could result in water quality impacts to onsite and offsite drainage flows to area waterways. As required by the City, the Project would be required to prepare a detailed project-specific drainage plan, Water Quality Management Plan, and a SWPPP that would control stormwater runoff from the site, both during and post-construction. Additionally, the Project would be required to comply with provisions under Chapter 13.28, Storm Water Management and Discharges, of the Manteca Municipal Code, which establishes minimum stormwater management requirements and controls to protect water quality.

The Project proposes to utilize the existing 2.88-acre detention basin located in the southwest corner of the southern parcel to provide stormwater detention onsite. Stormwater runoff from the Project site would be directed to flow toward the existing detention basin prior to being discharged into the City's stormwater system. The Project would also be required to implement the following General Plan Update Policy CF-8.2 and which is intended to protect water quality and minimize stormwater impacts.

Adherence to City requirements and standards would ensure that Project operation would not violate any water quality standards or waste discharge requirements. Therefore, with the preparation and implementation of a SWPPP, detailed Project-specific drainage plan, a Water Quality Management Plan, and adherence to applicable City requirements, standards, and General Plan Update policies and actions

regarding water quality, the Project would not violate any water quality standards or waste discharge requirements and there would be a less than significant impact.

Level of Significance Before Mitigation
Less Than Significant Impact.

Mitigation Measures
No mitigation is necessary.

Level of Significance After Mitigation
Less Than Significant Impact.

Impact HYD-2	**Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?**

Impact Analysis
During the Preliminary Geotechnical Investigation, the depth to groundwater was about 19.6 to 24.2 feet bgs. Rockridge Geotechnical also reviewed historic groundwater data from other sites near the Project site, which indicated groundwater levels range from 13 to 15 bgs. Based on the groundwater level data measured at the site and the review of historic groundwater data, the Preliminary Geotechnical Investigation concluded a groundwater depth of 13 feet bgs should be used for planning purposes (Rockridge Geotechnical 2021). The Project would connect to the City's water supply system and would not include the construction of wells onsite that could decrease groundwater supplies or require substantial increases in pumping at City-owned wells. Furthermore, the Project does not involve the construction of below ground structures. The Project is anticipated to have a maximum excavation depth of 10 feet. Therefore, Project construction activities are not expected to encounter groundwater or require dewatering that would decrease groundwater supplies.

Operation of the Project would create approximately 46 acres of impervious surfaces and 18 acres of pervious surfaces, which would include landscaped areas, open space areas, flow through planters, and bioretention basins. Additionally, the Project proposes to utilize the existing 2.88-acre detention basin located adjacent to the southwest corner of the Project site to provide stormwater detention onsite. The pervious surfaces would reduce the amount of runoff from leaving the Project site and allow for groundwater recharge to continue following Project construction. Therefore, the Project would not substantially decrease water supplies or interfere substantially with groundwater recharge such that the Project may impede sustainable groundwater management, and impacts would be less than significant.

Level of Significance Before Mitigation
Less Than Significant Impact.

Mitigation Measures
No mitigation is necessary.

Level of Significance After Mitigation
Less Than Significant Impact.

Impact HYD-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:** **i) Result in substantial erosion or siltation on- or offsite;** **ii) Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;** **iii) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff;** **iv) Impede or redirect flood flows**

Impact Analysis

i) Result in substantial erosion or siltation on- or offsite

Construction of the Project would include ground disturbing activities that could result in erosion related impacts. As discussed above in Impact HYD-1, the Project would be required to prepare and implement a SWPPP in accordance with the NPDES General Construction Permit. The SWPPP would include BMPs that would be implemented during construction activities to reduce the potential for erosion and impacts would be less than significant.

Operation of the Project could result in changes in drainage patterns due to new development and impervious areas that result in increased runoff leading to increased erosion and siltation. The City requires stormwater to be detained, and in some cases treated, before being released into the City's stormwater drainage system. The Project would include landscaped areas, open space areas, flow through planters, and bioretention basins to treat stormwater generated onsite prior to entering the City's stormwater system. The Project also proposes to utilize the existing 2.88-acre detention basin located in the southwest corner of the Project site to provide stormwater detention onsite. In addition to compliance with requirements for onsite treatment and detention of stormwater, the Project would be consistent with General Plan Update policies and actions identified to reduce impacts associated with stormwater and drainage including General Plan Update Policy CF-8.2 which requires new developments to demonstrate how stormwater runoff would be detained or retained onsite and/or conveyed to the nearest drainage facility as part of the development review process (City of Manteca 2022a). With implementation of the SWPPP and compliance with post construction stormwater management measures and detention of stormwater, the Project would not result in substantial erosion or siltation and the impacts would be less than significant.

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

As required by the City, the Project would utilize the existing 2.88-acre detention basin located adjacent to the southwest corner of the Project site, which would store stormwater runoff from the site. The Project would also provide approximately 18 acres of pervious surfaces consisting of landscaped areas, open space areas, flow through planters, and bioretention basins to treat stormwater generated onsite prior to

entering the City's stormwater system. As identified in the City's General Plan Update, development projects are required to prepare project-specific floodplain and drainage studies that assess the drainage characteristics and flood risks so that an appropriate stormwater drainage plan can be prepared to control stormwater runoff, both during and after construction (City of Manteca 2022a). Though the rate and amount of surface runoff at the site would increase resulting from development of the Project, use of the detention basin adjacent to the site and onsite pervious surfaces would control the volume of stormwater runoff and would reduce the potential for flooding. Therefore, the Project would not substantially increase the rate or amount of surface runoff in a manner which would result in flooding and impacts would be less than significant.

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

As described previously, construction activities would have the potential to generate polluted runoff, and therefore, the Project would be required to prepare and implement a SWPPP during construction to prevent, control and reduce polluted runoff from entering the City's storm drain system. Stormwater generated at the site would be directed to flow through planters and bioretention basins prior to entering the piped storm drain system. The storm drainage system at the site would be designed per NPDES Phase II Permit and City of Manteca Storm Drain Master Plan Standards to properly manage runoff from the site to ensure that the capacity of stormwater drainage systems is not exceeded. As stated above, development projects are required to prepare project-specific floodplain and drainage studies that assess the drainage characteristics and flood risks so that an appropriate storm drainage plan can be prepared to control stormwater runoff, both during and after construction. Additionally, the Project would be required to comply with the regulations and standards of Chapter 13.28 of the City's Municipal Code which includes requirements to reduce and minimize polluted runoff. Therefore, the Project would not 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 and impacts would be less than significant.

iv) Impede or redirect flood flows

There are no waterways crossing the Project site or nearby that would be impacted from Project construction and operation. The proposed buildings and onsite hardscape would be drained by onsite storm drainage systems connecting to the City's existing 48-inch diameter stormwater drainage system, located along E. Atherton Drive. Before discharging to the City storm drain, runoff from the site would flow through detention and treatment measures as discussed above and would meet City requirements for stormwater drainage systems. As such, the Project would not impede or redirect flood flows and there would be no impact.

Level of Significance Before Mitigation
Less Than Significant Impact.

Mitigation Measures
No mitigation is necessary.

Level of Significance After Mitigation
Less Than Significant Impact.

Impact HYD-4	In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?

Impact Analysis
The Project site is not within a tsunami hazard area. According to FIRM #06077C0640F, the Project site is designated as Zone X, which are areas with minimal flood hazard (FEMA 2024). The General Plan Update EIR identifies the threat of large-scale damage from seiches comes from downstream flooding that would be caused by large volumes of water overtopping a dam or reservoir. The Project site is identified within the dam inundation risk area for the New Melones Dam (City of Manteca 2022a). As discussed, the General Plan Update EIR identifies that regular inspection by DSD and maintenance by dam owners ensure that the dams are kept in safe operating condition and as such, failure of dams is considered to have an extremely low probability of occurring and is not considered to be a reasonably foreseeable event. Therefore, the Project would not risk the release of pollutants due to project inundation by flood hazards, seiches, or tsunamis. The impact would be less than significant.

Level of Significance Before Mitigation
Less Than Significant Impact.

Mitigation Measures
No mitigation is necessary.

Level of Significance After Mitigation
Less Than Significant Impact.

Impact HYD-5	Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

Impact Analysis
Manteca is under the jurisdiction of the Central Valley RWQCB, and the Project would be required to comply with the policies and objectives of the Water Quality Control Plan for the Sacramento-San Joaquin River Basins (Basin Plan). The Basin Plan describes water quality objectives for surface water and groundwater. The Project would be required to obtain a NPDES Construction General Permit and implement a SWPPP which would incorporate BMPs that would meet the requirements of the Basin Plan to reduce potential impacts to water quality. Additionally, the Project would comply with the policies and actions from the General Plan Update which are consistent with the Eastern San Joaquin Groundwater Subbasin Groundwater Sustainability Plan. Therefore, the Project would not conflict with or obstruct implementation of the water quality or groundwater management plan and the impact would be less than significant.

Level of Significance Before Mitigation
Less Than Significant Impact.

Mitigation Measures
No mitigation is necessary.

Level of Significance After Mitigation
Less Than Significant Impact.

3.11 LAND USE AND PLANNING

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

3.11.1 Environmental Setting

Regional Setting

As described in the City's General Plan Update, the City's Planning Area includes the entire city limits which covers approximately 746 acres of land, the City's Sphere of Influence which covers approximately 6,664 acres, and approximately 6,593 acres of land outside of the City limits and Sphere of Influence (City of Manteca 2022a). The predominant land uses in the City and Planning Area are agricultural uses, single-family residential, institutional, and commercial. Additional uses in the City and Planning Area include industrial manufacturing and non-manufacturing, multi-family residential, parks and recreation, open space, office, and communication/utilities uses (City of Manteca 2022a).

Project Site Setting

The Project site is approximately 59.19 acres and consists of four parcels identified as APNs 224-040-52, 224-040-07, 224-040-06, and 224-040-11. The Project site is currently vacant and mostly covered by non-native grasses and weeds. Several unpaved roadways extend throughout the site and a paved roadway, referred to as Quintal Road, extends across the northwestern portion of the Project site and connects to S. Main Street. The site topography is generally flat with an elevation of approximately 30 feet above mean sea level.

The Project site is surrounded by urban development and is located in close proximity to services and major employers, including healthcare and medical services, retail, restaurant, and market/grocery. Land uses surrounding the Project site include single-family and multi-family residential uses to the east and south; Highway 120 and commercial uses to the north; and S. Main Street, vacant land, and commercial uses to the west. Additionally, there is a Chevron gas station located on S. Main Street and adjacent to the southwest corner of the Project site.

3.11.2 Previous Environmental Analysis

City of Manteca General Plan Update EIR

As discussed in the General Plan Update EIR, the General Plan Update does not include any new areas designated for urbanization or new roadways, infrastructure, or other features that would divide existing communities. Subsequent development and infrastructure projects would be required to be consistent with all applicable policies, standards, and regulations, including those land use plans, policies, and regulations adopted to mitigate environmental effects by the City as well as those adopted by agencies with jurisdiction over components of future development projects. Any potential environmental impact associated with conflicts with land use requirements would be less than significant (City of Manteca 2022a).

3.11.3 Project-Specific Impact Analysis

Impact LU-1 Physically divide an established community?

Impact Analysis
The Project site is located within an urbanized area of the City where communities are already established. The Project involves the development of 672 multi-family for-rent apartments, 48 for-sale two-family units, and 98 single-family for-sale homes on an approximately 59.19-acre undeveloped site. The Project also includes the development of an approximately 1.93-acre public open space. Central to the development, the public open space would provide open space designated for public use in the same way as a public park and central meeting location that offers green lawns and space for active and passive uses for all visitors. The public open space would include amenities such as a picnic area with shade canopy, active recreation court with cricket pitch, kids play area, multi-use pathways, strolling pathways and a flex court. The public open space would be accessible to all residents and visitors of the area. Additionally, the Project would construct improvements to adjacent streets, on and offsite utility infrastructure, parking, driveways, frontage improvements, and landscaping. Development of the Project would not introduce physical features that could create a barrier, divide, or separate adjacent uses; or impede circulation through the area. Therefore, the Project would not physically divide an established community and there would be no impact.

Level of Significance Before Mitigation
No Impact.

Mitigation Measures
No mitigation is necessary.

Level of Significance After Mitigation
No Impact.

Impact LU-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?**

Impact Analysis

General Plan Update Consistency

The Project is requesting a General Plan Amendment to re-designate approximately 38.5 acres of the Project site as HDR and the remaining 20.7 acres as LDR. The HDR land use designation would apply to the proposed multi-family and two-family homes in the northwestern portion of the Project site. The LDR land use designation would apply to the single-family uses in the northeastern and southern portions of the Project site.

According to the General Plan Update, the HDR land use designation has a standard of 20.1 to 30 dwelling units per acre and provides for multi-family townhome, condominium, apartment style housing, and mobile home parks. The multi-family dwelling sites are typically located with direct access to arterial streets. Sites should be located near a neighborhood park, a neighborhood commercial center, or jobs centers and should provide pedestrian and bicycle connections to these amenities and services. The LDR land use designation has a standard of 2.1 to 8 dwelling units per acre and provides for a mix of single-family housing, including small lots, clustered lots, attached homes, and conventional large lot detached residences. When combining the minimum density requirements of the entire Project site, it would require a total of 818 units as demonstrated in Table 3.11-1.

Table 3.11-1: Project Site Land Use Density Requirements

Proposed Land Use	Acres	Min. Density (du/acre)	Max. Density (du/acre)	Min. Dwelling Units Required	Max. Dwelling Units Permitted
High Density Residential	38.5	20.1	30	774	1,155
Low Density Residential	20.7	2.1	8	44	166
Total	**59.2**	**22.2**	**38**	**818[1]**	**1,321[2]**

Notes:

[1] Calculated by multiplying acreage by minimum density (acreage x min density)

[2] Calculated by multiplying acreage by maximum density (acreage x max density)

The Project proposes 818 units, and therefore would be consistent with the minimum allowable density range for the HDR and LDR land use designations.

Approval of a General Plan Amendment would require the Project to be consistent with the City's General Plan Amendment criteria. The following discussion demonstrates the Project's consistency with the City's General Plan Amendment criteria:

- **The amendment is deemed to be in the public interest:** The approval of the General Plan Amendment would allow the Project site to be developed with a variety of housing types with a range of prices and affordability that would be beneficial to the public.

- **The amendment is consistent and/or compatible with the rest of the General Plan:** As shown in Table 3.11-2, the Project would be consistent with the applicable land use policies and goals from the General Plan Update. The Project would provide uses onsite that are consistent and compatible with the designated uses outlined in the General Plan Update.

- **Potential impacts of the amendment have been assessed and have been determined not to be detrimental to the public health, safety, or welfare:** As outlined in the analysis provided in this Tiered ISMND, the Project and its required amendments and approvals have been assessed in this Tiered ISMND and would not be detrimental to the public health, safety, or welfare.

Additionally, the Project is subject to the goals and policies of the City's General Plan Update. Table 3.11-2 evaluates the Project's consistency with applicable goals and policies from the General Plan Update.

Table 3.11-2: General Plan Update Consistency Analysis

Policy	Consistency Analysis
Land Use	
Goal LU-1: Maintain a land use plan that provides a mix of distribution of uses that meet the identified needs of the community.	**Consistent.** The Project would provide a variety of housing types with a range of prices and affordability within an urbanized community and would maintain the General Plan's proposed land uses for the site.
Policy LU-1.2: Promote land use compatibility through use restrictions, development standards, environmental review, and design considerations.	**Consistent.** Compliance with development standards of the site and design review required by the City would ensure that the Project would not result in incompatible land uses. Additionally, the Project would be consistent with the intended and planned uses adjacent to and surrounding the Project site and would be beneficial long term to the City by providing increased housing in an area intended for urbanized developments.
Policy LU-1.5: For contiguous properties that are included in a single development application, flexibility may be allowed in the location of the designated uses within the subject site. The acreage of each land use designation shall be maintained, but designated uses may be relocated within the site provided the relocation would not result in incompatibilities with adjacent or nearby land uses or designations. This policy also applied to a single property with multiple land use designations.	**Consistent.** The Project would utilize Policy LU-1.5 to allow flexibility in the location of typologies within the site such that density could transition appropriately. Notably, for the portion of the Project site located north of E. Atherton Drive, the Project is proposing a mix of housing typology uses comprising a high density use, including multi-family, single-family and two-family uses. These denser residential uses would be located away from existing neighboring residential communities. Additionally, the Project would be consistent with the intended and planned uses adjacent to and surrounding the Project site and would be beneficial long term to the City by providing increased housing in an area intended for urbanized developments.
Goal LU-2: Promote infill development and provide for orderly, well-planned, and balanced growth that does not exceed the City's available infrastructure capacity and resources and is consistent with the General Plan.	**Consistent.** The Project would provide infill development on a vacant and underutilized site in the City and as outlined in this table, would be consistent with the applicable goals and policies of the General Plan. Additionally, as identified in Section 3.19, Utilities and Service Systems, the Project would not exceed the City's infrastructure capacity.
Policy LU-2.3: To maintain balanced growth and to manage the City's investment in infrastructure, facilities, and services for growth areas, encourage infill	**Consistent.** The Project site is located on a vacant, underutilized site within a highly urbanized area of the City. Development of the Project would be contiguous

Policy	Consistency Analysis
development, redevelopment, and rehabilitation projects within the City, prioritizing investments in underserved neighborhoods, and growth that is contiguous with existing development and/or the boundary of the City.	with existing nearby development and would implement infill development.
Goal LU-3: Establish and maintain residential neighborhoods that meet the housing needs of all residents and are safe and attractive places to live with convenient access to services, recreation, schools, and employment.	**Consistent.** The Project would develop new housing in an established neighborhood that is developed with existing residential and commercial uses and would maintain the character of the existing adjacent residential neighborhoods. The Project site is located within a highly urbanized area and has convenient access to services, recreation, schools, and employment.
Policy LU-3.1: Provide for the development of a variety of housing types and at a range of prices to meet the needs of all segments of the city's population, including individuals and families who qualify for affordable housing assistance in accordance with the housing element.	**Consistent.** The Project would provide a variety of housing types at a range of prices including 98 single-family for-sale homes, 48 for-sale two-family housing typologies, and 672 high density multi-family for-rent apartments.
Policy LU-3.2: Require the design of new residential development to be consistent with any applicable design guidelines, including complete streets standards, to ensure harmony with Manteca's unique character and compatibility with existing surrounding land uses.	**Consistent.** The Project would require Major Site Plan and Design Review as required by Section 17.10.060 of the Manteca Zoning Code and comply with the following policies from the General Plan Update to ensure that the proposed uses and buildings are compatible with the surrounding land uses. Offsite traffic improvements constructed for the Project would be consistent with applicable design guidelines and standards. The Project would include construction of offsite traffic improvements that would extend the existing circulation system surrounding the Project site and connect the new development with the adjacent communities to ensure that the Project is harmonious with the existing communities' character.
Policy LU-3.9: Locate residences and sensitive receptors away from areas of excessive noise, smoke, dust, odor, and lighting, and ensure that adequate provisions, including buffers or transitional uses, such as less intensive renewable energy production, light industrial, office, or commercial uses, separate the proposed residential uses from more intensive uses, including industrial, agricultural, or agricultural industrial uses and designated truck routes, to ensure the health and well-being of existing and future residents.	**Consistent.** The Project would construct residential developments in an area of the City already developed with similar residential and commercial uses and would not be located in areas of excessive noise, smoke, dust, odor, or lighting. The Project is approximately 500 feet south of Highway 120. The proposed buildings would be designed in accordance with CalGreen Tier 1 energy efficiency standards, which requires MERV-13 filters to be installed prior to occupancy. The Project would also provide landscaping and trees along the northern edge of the Project site, providing separation and buffering between the buildings and freeway.
Goal LU-10: Maintain a high-quality natural environment and recreational opportunities in and around Manteca.	**Consistent.** The Project would include the development of an approximately 1.93-acre public open space that would provide recreational opportunities for the residents of the Project as well as the public.
Policy LU-10.4: Require development projects to provide adequate and appropriately located land, easements, or other accommodation for recreational uses, including neighborhood parks, existing and planned trails, and connections to existing or planned trails and other recreational resources as set forth in the	**Consistent.** The Project would include the development of an approximately 1.93-acre public open space that would be central to the development and would provide open space designated for public use in the same way as a public park and offer green lawns and space for active and passive uses for all visitors.

Policy	Consistency Analysis
Resource Conservation Element, the Public Facilities and Services Element, and the Circulation Element.	Additionally, the Project would extend a Class I bicycle path across the northern frontage of E. Atherton Drive.
Policy LU-10.5: Provide new opportunities for community gathering and social interaction through park facilities, community centers, and cultural/art facilities.	**Consistent.** See discussion for Policy LU-10.4.
Goal LU-11: Maintain Manteca's Agricultural heritage by protecting and maintaining significant areas of agricultural lands around the city.	**Consistent.** As discussed in Section 3.2, Agriculture and Forestry Resources, the Project would provide public and private open space areas throughout the site, including two community gardens and orchard planting areas within each multi-family component to encourage onsite urban agricultural activities. The two community gardens would total approximately 5,500 square feet and consist of individual garden containers with a small support structure to store tools. The orchard planting areas would total approximately 32,000 square feet and would be planted with a mixed variety of trees that produce fruit, including but not limited to, lime and lemon trees. The incorporation of community gardens and orchard planting areas would maintain approximately 37,500 square feet of lands designated Farmland of Statewide Importance.
Policy LU-11.1: Protect agricultural land from urban development except where the General Plan Land Use Map has designated the land for urban uses.	**Consistent.** As discussed in Section 3.2, Agriculture and Forestry Resources, portions of the Project site are designated by the DOC's FMMP as Farmland of Statewide Importance and Farmland of Local Importance. However, the General Plan Update designates the site for urban uses and agricultural uses are not allowed under the site's land use and zoning designations. Additionally, the Project would be required to implement Mitigation Measure AG-1 which requires the Project to comply with the City's Agricultural Mitigation Fee Program and pay established fees to fund conservation easements on comparable or better agricultural lands to provide compensatory mitigation.
Circulation	
Goal C-2: Provide a safe, high quality, climate-resilient transportation system that addresses all modes of travel and include attractive streetscapes with native and drought-resistant landscaping, street plants, planted berms, and landscaped medians.	**Consistent.** The Project includes development of offsite traffic improvements to provide a safe and high-quality circulation system within and around the Project site. Additionally, the Project would provide landscaping along the Project frontages and would utilize drought-tolerant and low water use plants. Trees and landscaping would be provided along sidewalks, walks, and medians throughout the site.
Policy C-2.3: Require new development to pay a fair share of the costs of street and other transportation improvements based on impacts in conformance with the goals and policies established in this Circulation Element and the Public Facilities Implementation Program (PFIP).	**Consistent.** The Project includes offsite traffic improvements such as, but not limited to, restriping of roadways, new curb and gutter and travel lane improvements, construction of new intersections, and installation and upgrade of existing traffic signals. The Project would also extend a Class I bicycle path along the northern frontage of E. Atherton Drive. Additionally, the Project would pay its fair share of requires fees.
Policy C-2.6: Align residential and collector street intersections with collector and arterial streets with other residential and collector streets, where feasible, to	**Consistent.** The Project includes the construction of new residential and commercials roads throughout the site to provide adequate vehicular site circulation. New

Policy	Consistency Analysis
maintain a high degree of connectivity between neighborhoods, minimize circuitous travel, and to allow bicyclists and pedestrians to travel more conveniently and more safely from one neighborhood to another without using major streets	roadways constructed for the Project would be aligned with existing roadways to ensure adequate connectivity.
Policy C-2.8: Signals, roundabouts, traffic circles, and other traffic management, calming, and safety techniques shall be applied according to industry standards at residential and collector street intersections with collector and arterial streets in order to allow bicyclists and pedestrians to travel more conveniently and more safely from one neighborhood to another.	**Consistent.** The Project would install new traffic signals at the intersection of E. Atherton Drive and Buena Vista Drive and would upgrade existing traffic signals at the intersection of S. Main Street and E. Atherton Drive and both signals at the north and south intersections of S. Main Street and HWY 120 off- and on-ramps with modern traffic signal controllers.
Policy C-2.10: Development of private streets may be allowed 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.	**Consistent.** New streets constructed for the Project would be designed and constructed in accordance with City standards and requirements to ensure adequate emergency access and solid waste collection throughout the site.
Policy C-2.13: Require development projects to arrange streets in an interconnected block pattern, so that pedestrians, bicyclists, and drivers are not forced onto arterial streets for inter- or intra-neighborhood travel to support safer travel. This approach will also add redundancy to the street network, supporting more safe and more efficient movement of emergency responders and help reduce vehicle miles traveled within the community	**Consistent.** New streets constructed for the Project would be designed to be interconnected throughout the site to support safer travel.
Policy C-2.19: In the development of projects, ensure there are adequate corner-sight distances appropriate for the speed and type of facility, including intersections of city streets and private access drives and roadways.	**Consistent.** Access to and from the Project site would be designed to applicable City standards and requirements and would provide adequate corner-sight distances at all intersections.
Policy C-2.22: Incorporate emergency access, mountable medians, shoulders to bypass queued vehicles, emergency signal preemption, and other features into development and infrastructure projects to improve emergency response times as appropriate and feasible on new roadways and on existing roadways.	**Consistent.** The Project would be designed and constructed in accordance with City requirements and standards related to emergency response. New streets and intersections would meet the City's requirements for fire apparatus access as well as emergency ingress and egress from the site and an EVA lane required by the City's Fire Marshall would be incorporated into the Project design. The Project would install new curb and gutter and construct a new northbound lane of travel along S. Main Street, restripe the same S. Main Street segment, install new traffic signals at the intersection of E. Atherton Drive and Buena Vista Drive, and upgrade the traffic signals at the intersection of S. Main Street and E. Atherton Drive and both signals at the north and south intersections of S. Main Street and HWY 120 off- and on-ramps with modern traffic signal controllers. All offsite traffic improvements would be constructed to meet the City's standards and requirements related to emergency response. Offsite traffic improvements would improve emergency response access in the Project area.
Goal C-3: Establish reasonable vehicle parking requirements (minimum and maximum rates for uses) that limit parking encroachment while minimizing the amount of land consumed by parking lots.	**Consistent.** The Project's proposed number of parking spaces provided would exceed the minimum parking requirements as outlined in the Manteca Municipal

Policy	Consistency Analysis
	Code Section 15.52.050 and CalGreen Code Section 4.106.4.1 and 4.106.4.2.2.
Policy C-3.2: Require new development to provide an appropriate 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 to ensure that adequate parking is available for typical activities associated with a use as well as for special events, where anticipated and appropriate, and to ensure that parking standards encourage alternatives to single occupant vehicles.	**Consistent.** See discussion for Goal C-3.
Community Design	
Goal CD-1: Strengthen Manteca's identity and sense of place by reinforcing the community's distinctive, high quality urban form, natural landscape, and character.	**Consistent.** The Project would be designed in accordance with the City's design guidelines and would provide development that reinforces the community's urban form and character and would be consistent with the existing adjacent uses.
Policy CD-1.1: Require development projects to preserve positive characteristics and unique features of the site and consider the scale and character of adjacent uses	**Consistent.** The Project would be designed to preserve the characteristics of the existing adjacent developments and would not result in construction of new structures that would not be of similar scale or character of adjacent uses. The tallest proposed building would be the three-story multi-family garden style apartment complex which would have a maximum height of 37 feet, consistent with the scale of surrounding uses.
Goal CD-2: Ensure project designs reinforce a sense of place, reflect human scale and orientation, and are cohesive and sensitive to the surrounding built environment and/or natural landscape.	**Consistent.** See discussion for Policy CD-1.1.
Policy CD-2.7: Ensure that new development and redevelopment reinforces desirable elements of its neighborhood, district, or center, including architectural style, scale, and setback patterns.	**Consistent.** See discussion for Policy CD-1.1.
Policy CD-2.8: For infill development, incorporate context sensitive design elements that maintain compatibility and raise the quality of the area's architectural character.	**Consistent.** See discussion for Policy CD-1.1.
Policy CD-2.10: Require that lighting and fixtures be integrated with the design and layout of a project and that they provide a desirable level of security and illumination.	**Consistent.** Exterior lighting would be provided throughout the site for security and safety purposes. All lighting installed would be designed and constructed in accordance with the Manteca Municipal Code Chapter 17.50. Lighting, which contains standards and provisions related to exterior lighting.
Goal CD-5: Enhance the corridors, pathways, and edges that form physical boundaries and provide transitions and connections that reduce barriers throughout the community.	**Consistent.** The Project would include offsite circulation improvements such as the extension of the Class I bicycle path along the Project frontage and construction of a new bus stop to reduce barriers throughout the community and provide connections throughout the area.
Policy CD-5.1: Encourage new and, when necessary, existing streets to improve walkability, bicycling, and transit integration and accessibility; strengthen	**Consistent.** The Project would include offsite curb and gutter construction and improvements for walkability and accessibility. Additionally, the Project would extend

Policy	Consistency Analysis
connectivity; and enhance community identity through improvements to the public right-of-way such as sidewalks, street trees, parkways, curbs, street lighting, and street furniture.	a Class I bicycle path across the northern Project site frontage to improve bicycle integration and accessibility in the vicinity of the site.
Community Facilities and Services	
Goal CF-3: Ensure the provision of high quality and responsive fire protection services.	**Consistent.** The Project would be designed to provide adequate access to the site for fire protection vehicles and would be constructed and operated in accordance with the California Fire Code requirements and City standards to ensure that the City's fire department is able to provide high quality and responsive fire protection services.
Policy CF-3.5: Ensure that new development is designed, constructed, and equipped consistent with the requirements of the California Fire Code in order to minimize the risk of fire.	**Consistent.** The Project would be constructed and operated in accordance with California Fire Code requirements and City standards such as the use of automatic sprinklers and fire hydrants to reduce and minimize the risk of fires.
Policy CF-3.6: Ensure that new development and existing development, including older, low income, and disadvantaged areas, is served with adequate water volumes and water pressure for fire protection.	**Consistent.** The Project would be served by the City's water distribution system which would serve the site with adequate water volumes and water pressure for fire protection.
Goal CF-4: Maintain a diverse and comprehensive system of parks, trails, recreation facilities, and recreation programs that meets the needs of all segments of the community and supports economic development and residential growth in the City.	**Consistent.** The Project would develop a 1.93-acre public open space onsite that would essentially function as a public park and would contribute to the City's parks and recreation needs and would support residential growth in the Project area.
Policy CF-4.4: Maintain an overall minimum ratio of 5 acres of developed neighborhood and community parkland per 1,000 residents within the city limits, requiring new development to contribute to its fair share of park and recreation needs. The distribution of land between park types and guidelines for park types shall be determined within the Parks and Recreation Master Plan.	**Consistent.** The Project would develop a 1.93-acre public open space onsite that would essentially function as a public park and would contribute to the City's parks and recreation needs. Additionally, the Project would extend an existing Class I bicycle path across the northern frontage of E. Atherton Drive and provide nearby residents with additional recreational opportunities.
Goal CF-6: Provide an adequate, reliable, and safe water supply, storage, and distribution system to meet the needs of existing and projected development.	**Consistent.** The Project would construct new water mains throughout the site and would connect to the City's water supply system to provide the new development access to adequate, reliable, and safe water system.
Policy CF-6.7: 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.	**Consistent.** The Project would pay all required fees for new developments to fund its fair share of costs for public services.
Goal CF-8: Provide 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.	**Consistent.** The Project would include the development of new stormwater drainage system onsite and would utilize the existing detention basin located adjacent to the site to provide detention of stormwater runoff onsite to accommodate increased runoff resulting from development of the Project and to prevent flooding.
Policy CF-8.2: Require all development projects to demonstrate how storm water runoff will be detained or retained onsite and/or conveyed to the nearest drainage facility as part of the development review	**Consistent.** The Project would comply with the NPDES Construction General Permit during construction and development of the Project to reduce any drainage impacts during construction. Additionally, the Project

Policy	Consistency Analysis
process and as required by the City's NPDES Municipal Regional Permit. Project applicants shall mitigate any drainage impacts as necessary and shall demonstrate that the project will not result in any increase in offsite runoff during rain and flood events.	would prepare a detailed Project-specific drainage plan, Water Quality Management Plan, and a SWPPP to control stormwater runoff from the site post-construction. The Project would utilize the existing detention basin located adjacent to the southwest corner of the Project site to provide detention of stormwater runoff.
Resource Conservation	
Goal RC-3: Preserve and maintain Manteca's soils to avoid the pollution of surface waters, decreased air quality, and erosion.	**Consistent**. As identified in Section 3.7, Geology and Soils, and 3.10, Hydrology and Water Quality, the Project would obtain a NPDES Construction General Permit and prepare and implement a SWPPP that includes BMPs to minimize erosion and loss of topsoil during construction to ensure that construction does not result in polluted runoff. Once constructed, the Project would be landscaped and/or covered in buildings or hardscape features and would not result in erosion or loss of topsoil. Additionally, the Project would provide onsite treatment of stormwater runoff to ensure that the Project would not result in the polluted runoff.
Policy RC-3.1: Encourage best practices to enhance soil quality and to minimize soil erosion and loss of topsoil from land development activities, wind, and water flow.	**Consistent.** See discussion for Goal RC-3.
Goal RC-4: Improve climate resiliency through reducing greenhouse gas emissions through sustainable energy, transportation, land use, and local government actions that maximize energy efficiency and reduce energy usage and greenhouse gas emissions.	**Consistent.** The Project would be 100 percent electric and would install solar panels to increase use of sustainable energy and reduce GHG emissions. Additionally, the Project would be designed in accordance with CalGreen Tier 1 standards which would ensure that the Project is designed to maximize energy efficiency and reduce energy usage and GHG emissions. The Project would also provide a new bus stop and extend a Class I bicycle path along the Project frontage to promote alternative modes of transportation to reduce vehicle trips.
Policy RC-4.6: Require all new public and privately constructed buildings to meet and comply with construction and design standards that promote energy conservation, including the most current "green" development standards in the California Green Building Standards Code.	**Consistent.** The Project would include energy conservation features including solar panels and would be designed in accordance with CalGreen Tier 1 standards. Additionally, the Project would be 100 percent electric and would not rely on the use of natural gas.
Policy RC-4.7: Support expanded innovative and green building best practices including, but not limited to, LEED certification for all new development and retrofitting existing uses and encourage public and private projects to exceed the most current "green" development standards in the California Green Building Standards Code.	**Consistent.** See discussion for Policy RC-4.6.
Goal RC-5: Protect the health and welfare of city residents and visitors by promoting development and planning practices that are compatible with federal, state, and local air quality standards and regulations and implement regional efforts to improve air quality.	**Consistent.** As discussed in Section 2.3.3, Construction Equipment and Workers, the Project would use clean construction fleet that meets the USEPA and ARB Tier 4 off-road emission standards to ensure that the Project would be compatible with federal, state, and local air quality standards and regulations and to improve air quality.

Policy	Consistency Analysis
Policy RC-5.3: Require construction and operation of new development to be managed to minimize fugitive dust and air pollutant emissions.	**Consistent.** The Project's construction and operation would be required to comply with SJVAPCD standards and regulations to minimize fugitive dust and air pollutant emissions. The Project would comply with the SJVAPCD's Regulation VIII Fugitive Dust Prohibitions by incorporating best management practices to minimize construction emissions.
Policy RC-5.4: Require installation of energy-efficient appliances and equipment, including wood-burning devices, in development projects to meet current standards for controlling air pollution, including particulate matter and toxic air contaminants.	**Consistent.** The Project's buildings would be designed, constructed, and operated in accordance with CalGreen and Title 24 energy efficiency standards. The Project would be 100 percent electric and would not rely on any natural gas. Additionally, the Project would be consistent with 2022 CalGreen building standards and the Applicant would implement MERV 13 filters to ensure Project residents are not exposed to TACs.
Goal RC-6: Provide and preserve a network of diverse, safe, and accessible open spaces.	**Consistent.** The Project would include the development of an approximately 1.93-acre public open space that would be designated for public use in the same way as a public park and would offer space for active and passive recreational uses. Additionally, the Project would include the extension of an existing Class I bicycle path along the northern frontage across E. Atherton Drive.
Policy RC-6.10: Require development projects to maximize the potential for open space, visual experiences, and passive and active recreation.	**Consistent.** See discussion for Goal RC-6.
Goal RC-7: Encourage the continuation of agricultural uses and discourage the premature conversion of agricultural land to nonagricultural uses.	**Consistent.** The Project would develop a vacant and underutilized site within the City's urbanized areas and would not include development of or near agricultural lands that would subject adjacent lands to premature development pressure. As identified in Section 3.1, Agricultural Resources, though the DOC's FMMP identified the Project site as containing Important Farmland, the Project site is designated by the General Plan and Zoning Ordinance for urban uses and the land use designation and zoning for the site does not allow agricultural uses onsite. Therefore, development of the site for urbanized uses would be beneficial to the City as it would place new urbanized development within a highly urbanized area of the City and would be located away from agricultural land. As the site is designated for urban uses, the Project would not result in premature conversion of agricultural land to nonagricultural uses.
Policy RC-7.2: 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.	**Consistent.** See discussion for Goal RC-7.
Safety	
Goal S-2: Prevent loss of lives, injury, and property damage due to geological hazards and seismic activity and prevent disruption of essential services in the event of an earthquake.	**Consistent.** As discussed in Section 3.7, Geology and Soils, the Project would be designed and constructed in accordance with the CBC, General Plan Update, Zoning Ordinance, and other adopted regulations related to construction of new developments to

Policy	Consistency Analysis
	withstand seismic events and geologic hazards and would mitigate potential impacts.
Policy S-2.3: Require new development to mitigate the potential impacts of geologic and seismic hazards, including uncompacted fill, liquefaction, and subsidence, through the development review process.	**Consistent.** See discussion for Goal S-2.
Goal S-3: Protect life and property from flood events through providing a planning framework for flood protection and risk management consistent with Federal and State law and pursuing flood control solutions that minimize environmental impacts.	**Consistent.** Section 3.10, Hydrology and Water Quality provided an analysis of the potential flood risk at the Project site and determined that the Project site is located within an area of minimal flood hazard. The Project would utilize the existing detention basin located adjacent to the Project site to provide detention of stormwater runoff and prevent flooding in the City's drainage system. Additionally, the Project would prepare a detailed Project-specific drainage plan that would outline how the Project's stormwater drainage system would handle increased runoff and provide flood protection.
Policy S-3.3: Require evaluation of potential flood hazards prior to approval of development projects to determine whether the proposed development is reasonably safe from flooding and consistent with California Department of Water Resources Urban Level of Flood Protection Criteria (ULOP). The City shall not approve the execution of a development agreement, a tentative map, or a parcel map for which a tentative map is not required, or a discretionary permit or other discretionary entitlement that would result in the construction of a new building, or construction that would result in an increase in allowed occupancy for an existing building, or issuance of a ministerial permit that would result in the construction of a new residence for property that is located within a 200-year flood hazard zone, unless the adequacy of flood protection as described in Government Code §65865.5(a), 65962(a), or 66474.5(a), has been demonstrated.	**Consistent.** As discussed in Section 3.10, Hydrology and Water Quality, the Project site is located within an area of minimal flood hazard.
Policy S-3.20: Require all development projects to demonstrate how storm water runoff will be detained or retained onsite, treated, and/or conveyed to the nearest drainage facility as part of the development review process. Project applicants shall demonstrate that project implementation would not result in increases in the peak flow runoff to adjacent lands or drainage facilities that would exceed the design capacity of the drainage facility or result in an increased potential for offsite flooding.	**Consistent.** See discussion for Policy CF-8.2.
Goal S-6: Protect the quality of life by protecting the community from harmful and excessive noise.	**Consistent.** As discussed in Section 3.13, Noise, the Project would comply with the City's noise standards for construction and operation to ensure that the Project would not result in harmful or excessive noise that would affect the surrounding community.
Policy S-6.4: Require residential and other noise-sensitive development projects to satisfy the noise level criteria in Tables S-1 and S-2.	**Consistent.** As discussed in Section 3.13, Noise, the Project would comply with all applicable General Plan policies and implementation measures related to noise. The Project would comply with General Plan Update Action S-6c which requires preparation of a noise

Policy	Consistency Analysis
	analysis once onsite operational equipment is selected to ensure the equipment would be designed to incorporate noise reduction measures as needed, such as shielding, barriers, and/or attenuators to reduce noise level. Additionally, General Plan Update Action S-6c requires the Project to comply with the City's noise standards for construction, prepare a Construction Noise Management Plan, and implement construction noise reduction measures.
Policy S-6.6: Regulate construction-related noise to reduce impacts on adjacent uses to the criteria identified in Table S-2 or, if the criteria in Table S2 cannot be met, to the maximum level feasible using best management practices and complying with the MMC Chapter 9.52.	**Consistent.** As discussed in Section 3.13, Noise, the Project would implement and comply with the City's construction noise regulations. The Project would comply with General Plan Update Action S-6c to reduce noise associated with construction. Additionally, General Plan Update Action S-6c requires the Project to comply with the City's noise standards for construction, prepare a Construction Noise Management Plan, and implement construction noise reduction measures.
Housing Element	
Goal H-7: To encourage energy efficient residential and neighborhood designs that reduce total housing costs by lowering ongoing operations and maintenance costs.	**Consistent.** The Project would be all electric, would not rely on natural gas, and would employ energy conservation measures. Additionally, the Project would include energy efficient residential designs as the proposed buildings would be designed in accordance with CalGreen Tier 1 standards. Solar panels would be placed over the covered parking areas of the multi-family component and on the roofs of the single-family homes.
Policy H-P-54: The City shall promote the use of energy conservation features in the design of all new residential structures.	**Consistent.** See discussion for Goal H-7.
Policy H-P-55: The City shall enforce State requirements, including Title 24 requirements, for energy conservation in new residential projects and encourage residential developers to employ additional energy conservation measures with respect to the following: • Street and driveway design • Lot pattern and configuration • Siting of buildings • Landscaping • Solar access	**Consistent.** See discussion for Goal H-7.

Per the policy consistency analysis above, the Project is consistent with the applicable goals and policies of the General Plan Update and the impact would be less than significant.

City of Manteca Zoning Code Consistency

The Project site is currently designated by the City's Zoning Ordinance as CMU. The Project is requesting to rezone approximately 38.5 acres of the Project site to R-3 for the multi-family and two-family homes, and the remaining 20.7 acres of the site to R-1 for the single-family uses.

According to the City's Zoning Ordinance, the R-3 zoning district includes multi-family apartment-style housing. The multi-family dwelling sites are typically located with direct access to arterial streets, bicycle paths, and other transit options. The R-1 zoning district allows 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. The Project would be subject to the development standards for the R-3 and R-1 zoning districts, which allows a maximum height of 55 feet and 30 feet, respectively. The Project would be consistent with the maximum height requirements for the R-3 and R-1 zoning districts with the buildings for the multi-family component ranging from 34 to 37 feet tall, and the two-family and single-family homes up to 30 feet tall.

The Project would require approvals for the proposed rezoning to not conflict with the City's plans, policies, and regulations. Additionally, the Project would require Major Site Plan and Design Review as required by Section 17.10.060 of the Manteca Zoning Code to ensure that the proposed uses and buildings are compatible with the surrounding land uses.

Overall, while the Project is requesting a General Plan Amendment and rezone, the Project would develop the site with a mix of housing typology uses comprising a high-density use, including multi-family, single-family, and two-family uses as evaluated in the General Plan Update and General Plan Update EIR. The proposed Project would not cause an impact greater than what has already been considered in the City's certified EIR. With approval of the General Plan Amendment and rezone, the Project would not conflict with the general plan land use designation or zoning, and impacts would be less than significant.

Level of Significance Before Mitigation
Less Than Significant Impact.

Mitigation Measures
No mitigation is necessary.

Level of Significance After Mitigation
Less Than Significant Impact.

3.12 MINERAL RESOURCES

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

3.12.1 Environmental Setting

The California Geological Survey classifies lands into Aggregate and Mineral Resource Zones (MRZ) based on guidelines adopted by the California State Mining and Geology Board, as mandated by the Surface and Mining Reclamation Act of 1977. These MRZs identify whether known or inferred significant mineral resources are present in an area. Local governments are required to incorporate identified MRZs delineated by the state into their general plans. As identified in the General Plan Update EIR, the western portion of the City is designated as MRZ-2, which are areas containing significant mineral resource (aggregate) deposits or have a high likelihood of containing mineral deposits. The southern/central portion of the City is also designated as MRZ-3, which are areas containing mineral deposits, but the significance of which cannot be evaluated from available data. Lands near the San Joaquin River contain sand deposits that are of regional significance. However, mining operations of these deposits have ceased, and the former quarry site has been developed with Oakwood Shores, a residential project (City of Manteca 2022a).

3.12.2 Previous Environmental Analysis

City of Manteca General Plan Update EIR

According to the General Plan Update EIR, the only MRZ-2 area in the City has been mined and then subsequently developed. Therefore, no significant potential for extraction remains from this known MRZ. Additionally, mining operations near the San Joaquin River have ceased, and the former quarry site has been developed with Oakwood Shores, a residential project (City of Manteca 2022a). There are no other known mineral deposits or resources within Manteca that are of significant value to the region or the state. Therefore, the General Plan Update EIR determined impacts related to mineral resources would be less than significant (City of Manteca 2022a).

3.12.3 Project-Specific Impact Analysis

Impact MIN-1	**Result in the loss of availability of a known mineral resource that would be a value to the region and the residents of the state?**

Impact Analysis
A portion of the Project site is located within MRZ-3, which is no longer available for mining. No mineral extraction activities exist on or the near the site, and mineral extraction is not included as part of the Project. Therefore, the Project would not result in the loss of availability of a known mineral resource, and no impact would occur.

Level of Significance Before Mitigation
No Impact.

Mitigation Measures
No mitigation is necessary.

Level of Significance After Mitigation
No Impact.

Impact MIN-2	**Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?**

Impact Analysis
There are no mineral resource recovery sites located on or in the vicinity of the Project site. Furthermore, the Project site has not been delineated as a locally important mineral resource recovery site by the General Plan Update, General Plan Update EIR, or any specific plan or other land use plan. Therefore, the Project would not result in the loss of availability of a locally important mineral resource recovery site, and no impact would occur.

Level of Significance Before Mitigation
No Impact.

Mitigation Measures
No mitigation is necessary.

Level of Significance After Mitigation
No Impact.

3.13 NOISE

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

3.13.1 Environmental Setting

Noise Fundamentals and Terminology

Noise is generally defined as unwanted sound that annoys or disturbs people and potentially causes an adverse psychological or physiological effect on human health. Because noise is an environmental pollutant that can interfere with human activities, evaluation of noise is necessary when considering the environmental impacts of a project.

Sound is mechanical energy transmitted by pressure waves over a medium such as air or water. Sound is characterized by various parameters that include the rate of oscillation of sound waves (frequency), the speed of propagation, and the pressure level or energy content (amplitude). In particular, the sound pressure level is the most common descriptor used to characterize the loudness of an existing sound level.

Although the decibel (dB) scale, a logarithmic scale, is used to quantify sound intensity, it does not accurately describe how sound intensity is perceived by human hearing. The perceived loudness of sound is dependent upon many factors, including sound pressure level and frequency content. The human ear is not equally sensitive to all frequencies in the entire spectrum, so noise measurements are weighted more heavily for frequencies to which humans are sensitive in a process called A-weighting, written as dB(A), and referred to as A-weighted decibels. There is a strong correlation between A-weighted sound levels and community response to noise. For this reason, the A-weighted sound level has become the standard tool of environmental noise assessment. Table 3.13-1 summarizes typical A-weighted sound levels for different common noise sources.

Table 3.13-1: Typical A-Weighted Sound Levelsa

Common Outdoor Activities	Noise Level (dB(A))	Common Indoor Activities
	-110-	Rock band
Jet flyover at 1,000 Feet		
	-100-	
Gas lawnmower at 3 Feet		
	-90-	
Diesel truck at 50 Feet at 50 MPH		Food blender at 3 Feet
Noisy urban area, daytime	-80-	Garbage Disposal at 3 Feet
Gas lawnmower, 100 Feet		
Commercial area	-70-	Vacuum Cleaner at 10 Feet
Heavy traffic at 300 Feet		Normal Speech at 3 Feet
	-60-	
Quiet urban daytime		Large business office
	-50-	Dishwasher in next room
Quiet urban nighttime		
Quiet suburban nighttime	-40-	Theater, large conference room (Background)
	-30-	
Quiet rural nighttime		Library
	-20-	Bedroom at night, concert hall (Background)
	-10-	
		Broadcast/recording studio
	-0-	

Source: Caltrans 2013

Different types of measurements are used to characterize the time-varying nature of sound. These measurements include the equivalent sound level (Leq), the minimum and maximum sound levels (Lmin and Lmax), percentile-exceeded sound levels (such as L10, L20), the day-night sound level (Ldn), and the community noise equivalent level (CNEL). Ldn and CNEL values often differ by less than 1 dB. As a matter of practice, Ldn and CNEL values are considered to be equivalent and are treated as such in this assessment. Table 3.13-2 defines sound measurements and other terminology used in this analysis.

Table 3.13-2: Definition of Sound Measurements

Sound Measurements	Definition
Decibel (dB)	A unitless measure of sound on a logarithmic scale, which indicates the squared ratio of sound pressure amplitude to a reference sound pressure amplitude. The reference pressure is 20 micro-pascals.
A-Weighted Decibel (dB(A))	An overall frequency-weighted sound level in decibels that approximates the frequency response of the human ear.
Maximum Sound Level (Lmax)	The maximum sound level measured during the measurement period.
Minimum Sound Level (Lmin)	The minimum sound level measured during the measurement period.
Equivalent Sound Level (Leq)	The equivalent steady state sound level that in a stated period of time would contain the same acoustical energy.

Sound Measurements	Definition
Percentile-Exceeded Sound Level (Lxx)	The sound level exceeded xx % of a specific time period. L10 is the sound level exceeded 10% of the time. L90 is the sound level exceeded 90% of the time. L90 is often considered to be representative of the background noise level in a given area.
Day-Night Level (Ldn)	The energy average of the A-weighted sound levels occurring during a 24-hour period, with 10 dB added to the A-weighted sound levels occurring during the period from 10:00 PM to 7:00 AM.
Community Noise Equivalent Level (CNEL)	The energy average of the A-weighted sound levels occurring during a 24-hour period with 5 dB added to the A-weighted sound levels occurring during the period from 7:00 PM to 10:00 PM and 10 dB added to the A-weighted sound levels occurring during the period from 10:00 PM to 7:00 AM.
Peak Particle Velocity (Peak Velocity or PPV)	A measurement of ground vibration defined as the maximum speed (measured in inches per second) at which a particle in the ground is moving relative to its inactive state. PPV is usually expressed in inches/second.
Frequency: Hertz (Hz)	The number of complete pressure fluctuations per second above and below atmospheric pressure.

Source: FHWA 2006

With respect to how humans perceive and react to changes in noise levels, a 1 dB(A) increase is imperceptible, a 3 dB(A) increase is barely perceptible, a 5 dB(A) increase is clearly noticeable, and a 10 dB(A) increase is subjectively perceived as approximately twice as loud. These subjective reactions to changes in noise levels were developed on the basis of test subjects' reactions to changes in the levels of steady-state pure tones or broadband noise and to changes in levels of a given noise source. These statistical indicators are thought to be most applicable to noise levels in the range of 50 to 70 dB(A), as this is the usual range of voice and interior noise levels. Numbers of agencies and municipalities have developed or adopted noise level standards, consistent with these and other similar studies to help prevent annoyance and to protect against the degradation of the existing noise environment.

For a point source such as a stationary compressor or construction equipment, sound attenuates based on geometry at a rate of 6 dB per doubling of distance. For a line source such as free-flowing traffic on a freeway, sound attenuates at a rate of 3 dB per doubling of distance. Atmospheric conditions including wind, temperature gradients, and humidity can change how sound propagates over distance and can affect the level of sound received at a given location. The degree to which the ground surface absorbs acoustical energy also affects sound propagation. Sound that travels over an acoustically absorptive surface, such as grass, attenuates at a slightly greater rate than sound that travels over a hard surface, such as pavement. The increased attenuation is typically in the range of 1–2 dB per doubling of distance. Barriers, such as buildings and topography that block the line of sight between a source and receiver, also increase the attenuation of sound over distance.

Decibel Addition

Because decibels are logarithmic units, sound pressure levels cannot be added or subtracted through ordinary arithmetic. On the dB scale, a doubling of sound energy corresponds to a 3 dB increase. In other words, when two identical sources are each producing sound of the same loudness, their combined sound level at a given distance would be 3 dB higher than one source under the same conditions. For

example, if one source produces a sound pressure level of 70 dB(A), two identical sources would combine to produce 73 dB(A). The cumulative sound level of any number of sources can be determined using decibel addition.

Vibration Standards

Vibration is like noise such that it involves a source, a transmission path, and a receiver. While related to noise, vibration differs in that 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 vibration depends on their individual sensitivity to vibration, as well as the amplitude and frequency of the source and the response of the system that is vibrating.

Vibration can be measured in terms of acceleration, velocity, or displacement. A common practice is to monitor vibration in terms of peak particle velocity 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 in/sec 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 the number of perceived vibration events. Table 3.13-3 notes the general threshold at which human annoyance could occur is 0.1 PPV for continuous/frequent sources. Table 3.13-4 indicates the threshold for damage to typical residential and commercial structures ranges from 0.3 to 0.5 PPV for continuous/frequent sources.

Table 3.13-3: Guideline Vibration Annoyance Potential Criteria

Human Response	Maximum PPV (in/sec)	
	Transient Sources	Continuous/Frequent Sources
Barely perceptible	0.035	0.012
Distinctly perceptible	0.24	0.035
Strongly perceptible	0.90	0.10
Severe	2.0	0.40

Notes: Transient sources create a single isolated vibration event, such as blasting or drop balls. Continuous/frequent intermittent sources include impact pile drivers, pogo-stick compactors, crack-and-seal equipment, vibratory pile drivers, and vibratory compaction equipment.

Source: Caltrans 2020

Table 3.13-4: Guideline Vibration Damage Potential Criteria

Structure and Condition	Maximum PPV (in/sec)	
	Transient Sources	Continuous/Frequent Sources
Extremely fragile historic buildings, ruins, ancient monuments	0.12	0.08
Fragile buildings	0.30	0.12
Historic and some old buildings	0.50	0.20
Older residential structure	0.70	0.30
New residential structures	1.2	0.50
Modern industrial/commercial buildings	2.0	0.50

Notes:

Transient sources again create a single isolated vibration event, such as blasting or drop balls. Continuous/frequent intermittent sources include impact pile drivers, pogo-stick compactors, crack-and-seal equipment, vibratory pile drivers, and vibratory compaction equipment.

Source: Caltrans 2020

The operation of heavy construction equipment, particularly pile driving, and other impact devices, such as pavement breakers, create seismic waves that radiate along the surface of the ground and downward into the earth. These surface waves can be felt as ground vibration. Vibration from the operation of this equipment can result in effects ranging from annoyance of people to damage of structures. Varying geology and distance would result in different vibration levels containing different frequencies and displacements. In all cases, vibration amplitudes will decrease with increasing distance. Perceptible groundborne vibration is generally limited to areas within a few hundred feet of construction activities.

Table 7-4, Vibration Source Levels for Construction Equipment, in the 2018 Federal Transit Administration (FTA) Transit Noise and Vibration Impact Assessment Manual (FTA 2018) lists vibration source levels for the construction equipment most likely to generate high levels of ground vibration. The equipment listed in the FTA table includes impact and sonic pile drivers, clam shovel drops, hydromills, vibratory rollers, hoe rams, large and small bulldozers, caisson drilling, loaded trucks, and jackhammers. Table 3.13-5 below summarizes typical reference vibration levels generated by select construction equipment proposed for this Project.

Table 3.13-5: Vibration Source Levels for Construction Equipment

Equipment	PPVref at 25 Feet
Vibratory roller	0.210
Large bulldozer	0.089
Loaded trucks	0.076
Small bulldozer	0.003

Source: FTA 2018

Vibration amplitude attenuates over distance and is a complex function of how energy is imparted into the ground and the soil conditions through which the vibration is traveling. The following equation can be used to estimate the vibration level at a given distance for typical soil conditions (FTA 2018). The following equation in the FTA 2018 Transit Noise and Vibration Impact Assessment Manual can be used to estimate the vibration level at a given distance for typical soil conditions:

$$PPV = PPVref \times (25/Distance)^{1.5}$$

Existing Project Setting

Sensitive Receptors

Some land uses are more tolerant of noise than others. For example, schools, hospitals, churches, and residences are considered to be more sensitive to noise intrusion than are commercial or industrial activities. Ambient noise levels can also affect the perceived desirability or livability of a development.

The Project is located at the juncture of Quintal Road, S. Main Street, and E. Atherton Drive in the City of Manteca, in San Joaquin County on an approximately 59.19-acre vacant site. The Project site is bordered by S. Main Street, vacant land, and commercial uses to the west; and Highway 120 and commercial uses to the north. Existing single-family and multi-family residential developments border the Project site to the south and the east. The closest noise-sensitive receptors are the single-family residences along Grafton Street, Paola Place, and Queensland Avenue, located about 20 feet from the southern and eastern edge of the Project site.

Existing Ambient Noise Levels

The existing or ambient, noise environment in a project area is characterized by the area's general level of development. Areas which are not urbanized are relatively quiet, while areas that are more urbanized are noisier as a result of roadway traffic, industrial activities, and other human activities.

The City of Manteca is exposed to several sources of noise, including traffic on major highways, like Highway 120 and Highway 99, noise from busy arterial roads, such as S. Main Street, railroad traffic, and noise from commercial and industrial activities. The ambient noise levels anticipated at the Project site were determined using the noise contours shown in Figure 3.12-3, Future Transportation Noise Contours, in the General Plan Update. Based on Figure 3.12-3, the residences closest to Highway 120, S. Main Street, and E. Atherton Drive would experience noise levels above 65 dB(A) Ldn. Homes interior to the roadways would experience noise levels below 65 dB(A) Ldn. Therefore, the ambient noise levels at the Project site and closest residential receptors are expected to be above the maximum allowable noise exposure levels for mobile noise sources according to Table S-1, Maximum Allowable Noise Exposure from Mobile Noise Sources, in the Safety Element of the General Plan Update (Table 3.13-6).

Table 3.13-6: Maximum Allowable Noise Exposure Mobile Noise Sources

Table S-1. Maximum Allowable Noise Exposure Mobile Noise Sources			
Land Use[1]	**Outdoor Activity Areas[2,3]**	**Interior Spaces**	
		Ldn/CNEL, dB(A)	**Leq/CNEL, dB(A)[4]**
Residential	60[2]	45	--
Transient Lodging	60[2]	45	--
Hospitals, Nursing Homes	60[2]	45	--
Theaters, Auditoriums, Music Halls	--	--	35
Churches, Music Halls	60[2]	--	40
Office Buildings	65	--	45
Schools, Libraries, Museums	--	--	45
Playgrounds, Neighborhood Parks	70	--	--

Notes:

1. 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.
2. Outdoor activity areas for residential development are considered to be the back yard patios or decks of single-family units and the common areas where people generally congregate for multi-family developments. Where common outdoor activity areas for multi-family developments comply with the outdoor noise level standard, the standard will not be applied at patios or decks of individual units provided noise-reducing measures are incorporated (e.g., orientation of patio/deck, screening of patio with masonry or other noise-attenuating material). Outdoor activity areas for non-residential developments are the common areas where people generally congregate, including pedestrian plazas, seating areas, and outside lunch facilities; not all residential developments include outdoor activity areas.
3. In areas where it is not possible to reduce exterior noise levels to achieve the outdoor activity area standard with using a practical application of the best noise-reduction technology, an increase of up to 5 Ldn over the standard will be allowed provided that available exterior noise reduction measures have been implemented and interior noise levels are in compliance with this table.
4. Determined for a typical worst case hour during periods of use.

3.13.2 Previous Environmental Analysis

City of Manteca General Plan Update EIR

The General Plan Update EIR identified that buildout of the General Plan would result in increased noise levels in the City and temporary groundborne vibration impacts; however, with the implementation of General Plan policies and adherence to the City's Noise Ordinance and Municipal Code requirements, impacts would be less than significant (City of Manteca 2022a).

Additionally, the City's Planning Area is not within 2 miles of a public airport. Therefore, the General Plan Update EIR determined new development would not expose people residing or working in the City's Planning Area to excessive noise levels and the impact would be less than significant (City of Manteca 2022a).

3.13.3 Project-Specific Impact Analysis

As noted above, the noise contours shown in Figure 3.12-3, Future Transportation Noise Contours, in the General Plan Update EIR were used to provide baseline noise conditions at nearby sensitive receptors and within the Project site vicinity. For the purpose of this analysis, potential sensitive receptors were determined by reviewing current aerial photography.

Impacts from future Project-related traffic were estimated using predicted peak hour volumes contained in Section 3.17, Transportation.

The Federal Highway Administration (FHWA) Roadway Construction Noise Model (RCNM) was used to estimate the impact from short-term construction activities. The RCNM is used as the FHWA's national standard for predicting noise generated from construction activities. The RCNM analysis includes the calculation of noise levels at a defined distance for a variety of construction equipment. The spreadsheet inputs include acoustical use factors and distance to receptors and calculates the expected Lmax values and Leq values at a selected receptor. The results of the RCNM are provided in Appendix G.

Impact NOI-1	**Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?**

Impact Analysis

Exterior Traffic Noise Level Impacts

Traffic noise depends primarily on vehicle speed (tire noise increases with speed), proportion of medium and large truck traffic (trucks generate engine, exhaust, and wind noise in addition to tire noise), and number of speed control devices, such as traffic lights and stop signs (accelerating and decelerating vehicles and trucks can generate more noise).

Changes in traffic volumes can also have an impact on overall traffic noise levels. For example, it takes 25 percent more traffic volume to produce an increase of only 1 dB(A) in the ambient noise level. For roads already heavy with traffic volume, an increase in traffic numbers could even reduce noise because the heavier volumes could slow down the average speed of the vehicles. A doubling of traffic volume results in a 3 dB(A) increase in noise levels.

To initially describe the impact expected from traffic added from the Project, 2,040 AM and PM peak hour traffic volumes (with and without the Project) listed in the transportation analysis prepared by Stantec (Section 3.17) were used to determine the percentage increase of traffic on the roads adjacent to the Project site and nearby sensitive receptors.

Table 3.13-7 shows the peak hour volumes associated with traffic on the local roadway network under the 2040 and 2040 plus Project traffic conditions. The last columns in the table show the overall percentage change and the estimated difference in peak hour noise level in dB(A).

Table 3.13-7: Traffic Peak Hour Counts and Estimated Noise Increase

Roadway Intersection	2040 Peak Hour Traffic Volumes	2040 Peak Hour Traffic Volumes with Project	Percentage Change	Estimated dB(A) Change
1 – S. Main & Mission Ridge/ Industrial Park	2,347 (3,303)	2,384 (3,356)	1.6% (1.6%)	0.1 (0.1)
2 – S. Main & SR 120 WB Ramps	2,747 (3,305)	2,861 (3,462)	4.2% (4.8%)	0.2 (0.2)
3 – S. Main & SR 120 EB Ramps	2,887 (3,375)	3,062 (3,645)	6.1% (8.0%)	0.2 (0.3)
4 – S. Main & Quintal Rd	2,362 (2,675)	2,572 (3,061)	8.9% (14.4%)	0.4 (0.6)
5 – S. Main & E. Atherton	2,892 (3,515)	3,102 (3,824)	7.3% (8.8%)	0.3 (0.4)
6 – S. Main & E. Woodward	2,510 (2,555)	2,501 (2,554)	-0.4% (-0.04%)	-0.01 (-0.002)
7 – Buena Vista & E. Woodward	980 (1,050)	981 (1,057)	0.1% (0.7%)	0.004 (0.03)
8 – West Site Access & E. Atherton (Edge of Project site)	810 (880)	1,040 (1,268)	28.4% (44.1%)	1.1 (1.8)
9 – Center Site Access / Buena Vista & E. Atherton (Interior to Project site)	810 (880)	1,056 (1,328)	30.4% (50.9%)	1.2 (2.0)
10 – East Site Access & E. Atherton (Interior to Project site)	810 (880)	950 (1,216)	17.3% (38.2%)	0.7 (1.5)

Notes:
Numbers in parenthesis are PM peak hour traffic volumes; numbers not in parenthesis are AM peak hour traffic volumes.

Based on the traffic analysis, the Project is expected to minimally increase traffic counts on the surrounding roadways exterior to the Project site. As shown in Table 3.13-7, the increase in traffic noise levels interior to the Project site would be less than 2 dB(A). This noise level increase is barely perceptible as defined by the General Plan Update. Therefore, the Project would not cause increased traffic noise levels over the baseline conditions at the neighboring sensitive receptors, and this would be a less than significant impact.

Interior Traffic Noise Level Impacts – Residential Buildings

In accordance with the California Building Industry Association v. BAAQMD CEQA case law, the effect of the environment on the Project is not generally a CEQA consideration, unless the Project would exacerbate an existing condition. Although this issue is not a CEQA impact, it is a consideration for the City in determining Project approval.

The CBC and the General Plan Update states the interior noise levels attributable to exterior sources shall not exceed 45 dB(A) Ldn in any habitable room within multi-family residential units. The needed sound isolation requirements of a building's exterior façade will be dependent on the following conditions:

- The dimension of the rooms with exterior windows;
- The finishes within the rooms;

- The ratio of clear glass to solid wall in the exterior wall assembly; and
- The exterior solid wall construction.

Modern construction with punch windows typically provides a 25 dB(A) exterior-to-interior noise level reduction with the windows closed. Therefore, generally speaking, sensitive receptors exposed to an exterior noise level of 70 dB(A) Ldn or less would typically comply with the code-required interior noise level standard. Modern construction utilizing window walls, curtainwalls, or a high ratio of exterior clear glass would provide less reduction with the windows closed. Buildings using a high amount of glass would typically comply with the code-required interior noise level standard if exposed to exterior noise levels of 67 dB(A) Ldn or less. Furthermore, the Project would implement General Plan Update Policy S-6.7, which requires that an acoustical analysis is required as part of the development review process and identifies appropriate noise measures to incorporate into the project design. The acoustical analysis shall:

- *Be the responsibility of the applicant.*
- *Be prepared by a qualified acoustical consultant experienced in the fields of environmental noise assessment and architectural acoustics.*
- *Include representative noise level measurements with sufficient sampling periods and locations to adequately describe local conditions and the predominant noise sources.*
- *Estimate existing and projected (20 years) noise levels in terms of the standards of Table S-1 or Table S-2 and compare those levels to the adopted policies of the Noise Element.*
- *Recommend appropriate mitigation measures to achieve compliance with the adopted policies and standards of the Noise Element.*
- *Estimate noise exposure after the prescribed mitigation measures have been implemented.*
- *If necessary, describe a post-project assessment program to monitor the effectiveness of the proposed mitigation measures.*

The implementation of General Plan Update Policy S-6.7 would determine appropriate measures to reduce interior noise levels within the residential buildings to 45 dB(A) Ldn. Additionally, the Project would be required to comply with General Plan Update Policy S-6.12, which requires that new residential development backing on to a freeway or railroad right-of-way to incorporate appropriate noise attenuation measures to satisfy the performance standards in Table S-1 from the General Plan Update. Therefore, with implementation of General Plan Update Policies S-6.7 and S-6.12, the impact of traffic noise on the interior of the residential units would be less than significant.

Interior Traffic Noise Level Impacts –Non-Residential Spaces

CalGreen states if an occupied non-residential space (e.g., office building, childcare, community room, etc.) is exposed to a noise level of 65 dB(A) Leq 1-hour during any hour of operation, the exterior façade design shall incorporate features to reduce noise inside the spaces to a maximum of 50 dB(A) Leq 1-hour.

The proposed multi-family component would include two clubhouse buildings. The Phase 1 clubhouse is situated at the corner of E. Atherton Drive and Buena Vista Drive and the Phase 2 clubhouse is located adjacent to the Highway 120 on-ramp. Given the Project site may be exposed to an overall level above 65 dB(A) Ldn, there is a high probability the proposed clubhouse buildings would be exposed to a noise level of 65 dB(A) Leq 1-hour during occupied hours. The Project would be subject to the CalGreen requirements. The Project would implement General Plan Policy S-6.7, which would require that an acoustical analysis is prepared to identify appropriate measures to reduce interior and exterior noise considerations for the clubhouse buildings to 50 dB(A). As described above, the acoustical analysis shall:

- *Be the responsibility of the applicant.*
- *Be prepared by a qualified acoustical consultant experienced in the fields of environmental noise assessment and architectural acoustics.*
- *Include representative noise level measurements with sufficient sampling periods and locations to adequately describe local conditions and the predominant noise sources.*
- *Estimate existing and projected (20 years) noise levels in terms of the standards of Table S-1 or Table S-2 and compare those levels to the adopted policies of the Noise Element.*
- *Recommend appropriate mitigation measures to achieve compliance with the adopted policies and standards of the Noise Element.*
- *Estimate noise exposure after the prescribed mitigation measures have been implemented.*
- *If necessary, describe a post-project assessment program to monitor the effectiveness of the proposed mitigation measures.*

Therefore, with implementation of General Plan Policy S-6.7, the impact of traffic noise on the non-residential buildings would be less than significant.

Project Fixed-Source Noise

Typical commercial and residential building construction would involve new exterior and rooftop mechanical equipment, including air handling units, exhaust fans, condensing units, and air conditioning units. This equipment would generate noise that would radiate to the neighboring properties. This equipment would be required to comply with the maximum noise level limits listed in Paragraph 17.58.050.B, Noise Standards, in the Manteca Municipal Code, Table S-2 from the General Plan Update, and General Plan Update Policies S-6.4, S-6.5, and S-6.7.

As required by General Plan Policy S-6.7, a noise analysis would be prepared by a qualified acoustical consultant and the equipment would be designed to incorporate measures as needed, such as shielding, barriers, and/or attenuators to reduce noise levels that may affect nearby properties. Furthermore, noise levels from the Project's fixed-source equipment at any point outside of the property would be required to not exceed 60 dB(A) between the hours of 7:00 AM and 10:00 PM or 50 dB(A) between the hours of 10:00 PM and 7:00 AM at all adjacent existing residential properties. Therefore, with the requirements listed in the Manteca Municipal Code and the policies from the General Plan Update, the impact of fixed-source noise to the neighboring properties would be less than significant.

Short-term Construction Noise Impacts

Two types of short-term noise impacts could occur during construction. The first type of noise is from construction crew vehicular commutes that would incrementally increase noise levels on access roads leading to the Project site. Project construction would involve a peak of approximately 300 construction workers and 100 vendors traveling to and from the site. Assuming a worst-case of all worker and vendor vehicles entering or exiting the site at the same time, this would add 400 vehicles to the peak hour traffic volume on the neighboring roadways. Adding 400 vehicles to the 2040 traffic volumes at the intersection of S. Main Street and E. Atherton Drive represents a maximum 13.8 percent increase in traffic volumes. The added construction worker and vendor traffic equates to a maximum 0.6 dB(A) increase in noise and would result in a less than significant impact.

The second type of noise generated during construction is from the construction activity itself. Construction activities would include site preparation, grading, utility work, building construction, paving, and architectural coating. Pre-construction utility work and the construction of offsite improvements would also require construction equipment for grubbing and land clearing, grading and excavation, drainage, utilities, subgrade work, and paving. Each construction task has its own mix of equipment, and consequently, its own noise characteristics. The various construction operations would change the character of the noise generated at the Project site and therefore, the noise level as construction progresses. The loudest stages of construction typically include the grading and site preparation stages, as the noisiest construction equipment is typically earthmoving and grading equipment. The main types of noise-producing equipment for each construction phase and task are shown in Table 3.13-8.

Table 3.13-8: Construction Phase and Task Equipment

Construction Phase and Task	Construction Equipment	
Pre-construction Utility Work		
Grubbing / Land Clearing	• Tractor	• Excavators (2)
Grading / Excavation	• Tractors (3) • Graders (2) • Rubber-Tired Dozer • Front-End Loader • Haul Trucks (10)	• Excavators (3) • Rollers (2) • Scrapers (2) • Backhoe
Drainage / Utilities / Sub-Grade	• Air Compressor • Grader • Pump • Scraper • Front-End Loader	• Generator • Paving Equipment • Gradall Forklift • Tractor • Backhoe
Phase A – Two-Family Construction and Single-Family Construction **Phase B – Multi-family Construction**		
Site Preparation	• Rubber-Tired Dozers (3) • Front-End Loader	• Tractors (2) • Backhoe
Grading	• Excavators (2) • Rubber-Tired Dozer	• Grader • Tractor

Construction Phase and Task	Construction Equipment	
	• Front-End Loader • Haul Trucks (8)	• Scrapers (2)
Utilities	• Excavators (2) • Rubber-Tired Dozer • Tractor	• Grader • Scrapers (2) • Front-End Loader
Building Construction	• Crane • Generator • Backhoe • Welder	• Gradall Forklifts (3) • Tractor • Front-End Loader • Air Compressor
Paving	• Pavers (2) • Rollers (2)	• Paving Equipment (2)
Offsite Improvements		
Grubbing / Land Clearing	• Tractor	• Excavators (2)
Grading / Excavation	• Tractors (3) • Graders (2) • Rubber-Tired Dozer • Front-End Loader • Haul Trucks (5)	• Excavators (3) • Rollers (2) • Scrapers (2) • Backhoe
Drainage / Utilities / Sub-Grade	• Air Compressor • Grader • Pump • Scraper • Front-End Loader	• Generator • Paving Equipment • Gradall Forklift • Tractor • Backhoe
Paving	• Paver • Rollers (2) • Front-End Loader	• Paving Equipment • Tractor • Backhoe

Table 3.13-9 lists the types of construction equipment and the maximum and average operational noise level as measured at 20 feet from the operating equipment. The 20-foot distance represents the approximate distance between the Project and the closest noise-sensitive residential receptors located along Grafton Street, Paola Place, and Queensland Avenue.

Table 3.13-9: Federal Highway Administration Roadway Construction Noise Model Source Noise Levels

Construction Equipment Source at the Project Site	Distance to Nearest Sensitive Receptor, feet	Sound Level at Receptor		
		Lmax, dB(A)	Acoustical Use Factor (%)	Leq, dB(A)
Air Compressor	20	85.6	40	81.6
Backhoe	20	86.5	40	81.5
Crane	20	88.5	16	80.6
Excavator	20	88.7	40	84.7
Front-End Loader	20	87.1	40	83.1
Generator	20	88.6	50	85.6
Gradall Forklift	20	91.4	40	87.4
Grader	20	93.0	40	89.0
Haul Truck	20	84.5	40	80.5
Paver	20	85.2	50	82.2
Paving Equipment	20	85.2	50	82.2
Pump	20	88.9	50	85.9
Roller	20	88.0	20	81.0
Rubber-Tired Dozer	20	89.6	40	85.6
Scraper	20	91.5	40	87.6
Tractor	20	92.0	40	88.0
Welder	20	82.0	40	78.0

Source: Stantec 2024, Federal Highway Administration RCNM v1.1 2008

A worst-case condition for construction activity would assume all noise-generating equipment were operating at the same time and at the same distance from the closest noise-sensitive receptor. Using this assumption, the RCNM program calculated the following combined Leq and Lmax noise levels from each stage of construction as shown in Table 3.13-10.

Table 3.13-10: Calculated Noise Level from Each Construction Phase / Task

Construction Phase	Distance to Closest Noise Sensitive Receptor, ft	Calculated Lmax, dB(A)	Calculated Leq, dB(A)
Pre-construction Utility Work			
Grubbing / Land Clearing	**20**	94.9	90.9
Grading / Excavation	**20**	103.0	98.8
Drainage / Utilities / Sub-Grade	**20**	99.7	96.0
Phase A – Two-family Construction and Single-Family Construction Phase B – Multi-family Construction			
Site Preparation	20	98.3	94.3
Grading	20	100.6	96.6
Utilities	20	99.7	95.7
Building Construction	20	99.3	95.2
Paving	20	94.1	89.6
Offsite Improvements			
Grubbing / Land Clearing	20	94.9	90.9
Grading / Excavation	20	102.6	98.5
Drainage / Utilities / Sub-Grade	20	99.7	96.0
Paving	20	96.4	91.9

Construction noise levels are expected to be more than 12 dB(A) above ambient noise levels at the closest residential receptors, which would be considered substantial as defined by Implementation Measure N-I-3 in the General Plan Update. However, construction noise would be temporary, intermittent, and would vary depending on the nature of the construction activities being performed. The Project would comply with General Plan Update Action S-6c, which includes the following measures for construction:

- *Restrict construction activities to the hours of 7:00 AM to 7:00 PM on Monday through Friday, and 8:00 AM to 6:00 PM on Saturdays. No construction shall be permitted outside of these hours or on Sundays or federal holidays, without a specific exemption issued by the City. No exemption shall be issued for construction within 200 feet of residential uses.*

- *A Construction Noise Management Plan shall be submitted by the Applicant for construction projects that exceed ambient noise levels by more than 12dB(A) or produce perceptible vibrations at any offsite structures, when determined necessary by the City. The Construction Noise Management Plan shall include proper posting of construction schedules, appointment of a noise disturbance coordinator, methods for assisting in noise reduction measures, and shall establish*

allowed truck routes to access the site that minimize exposure of residential areas to heavy truck traffic.

- *Noise reduction measures shall include, but are not limited to, the following:*
    a. *Equipment and trucks used for Project construction shall utilize the best available noise control techniques (e.g., improved mufflers, equipment redesign, use of intake silencers, ducts, engine enclosures and acoustically attenuating shields or shrouds) wherever feasible.*
    b. *Except as provided herein, impact tools (e.g., jack hammers, pavement breakers, and rock drills) used for Project construction shall be hydraulically or electrically powered to avoid noise associated with compressed air exhaust from pneumatically powered tools. However, where use of pneumatic tools is unavoidable, an exhaust muffler on the compressed air exhaust shall be used. This muffler can lower noise levels from the exhaust by up to about 10 dB(A). External jackets on the tools themselves shall be used if such jackets are commercially available. This would achieve a reduction of up to 5 dB(A). Quieter procedures shall be used, such as drills rather than impact equipment, whenever such procedures are available and consistent with construction procedures.*
    c. *Temporary power poles or zero-emission power sources shall be used instead of generators where feasible.*
    d. *Stationary noise sources shall be located as far from adjacent properties as possible, and they shall be muffled and enclosed within temporary sheds, incorporate insulation barriers, or use other measures as determined by the City to provide equivalent noise reduction.*
    e. *The noisiest phases of construction shall be limited to less than 10 days at a time. Exceptions may be allowed if the City determines an extension is necessary and all available noise reduction controls are implemented.*
    f. *Delivery of materials shall observe the hours of operation described above.*
    g. *Truck traffic shall avoid residential areas to the greatest extent feasible.*

Compliance with General Plan Action S-6c would restrict construction activities to the hours of 7:00 AM to 7:00 PM on Monday through Friday, and 8:00 AM to 6:00 PM on Saturdays, require preparation of a construction noise management plan, and implementation of noise reduction measures. Therefore, the Project would comply with the City's construction noise standards, and impacts would be less than significant.

Level of Significance Before Mitigation
Less Than Significant Impact.

Mitigation Measures
No mitigation is necessary.

Level of Significance After Mitigation
Less Than Significant Impact

Impact NOI-2 Generation of excessive groundborne vibration or groundborne noise levels?

Impact Analysis

During construction of the Project, equipment such as trucks, bulldozers, and rollers may be used as close as 20 feet from the nearest sensitive receptors along Grafton Street, Paola Place, and Queensland Avenue. Equipment used during Project construction could generate vibration levels between 0.0042 PPV and 0.2935 PPV at 20 feet, as shown below in Table 3.13-11. If a large bulldozer, loaded trucks, or vibratory roller are used in the close proximity to the nearby residential receptors, groundborne vibration levels could exceed the FTA vibration threshold at which human annoyance could occur of 0.10 PPV.

Table 3.13-11: Calculated Vibration Levels for Construction Equipment

Type of Equipment	Peak Particle Velocity at 20 Feet	Threshold at which Human Annoyance Could Occur	Potential for Project to Exceed Threshold
Large Bulldozer	0.1244	0.10	Yes
Loaded Trucks	0.1062	0.10	Yes
Small Bulldozer	0.0042	0.10	None
Vibratory Roller	0.2935	0.10	Yes

Source: FTA 2018

As with any type of construction, vibration levels may at times be perceptible. However, construction phases that have the highest potential of producing vibration (such as paving) would be intermittent and would only occur for short periods of time. The Project would comply with Section 17.58.070 of the Manteca Municipal Code which outlines the following requirements:

> *Uses that generate vibrations that may be considered a public nuisance or hazard on any adjacent property shall be cushioned or isolated to prevent generation of vibrations. Uses shall be operated in compliance with the following provisions:*
>
> *A. No vibration shall be produced that is transmitted through the ground and is discernible without the aid of instruments at the points of measurement specified in Section 17.58.030 (Points of Measurement) of this Chapter, nor shall any vibration produced exceed 0.002g peak at up to 50 CPS frequency, measured at the point of measurement specified in Section 17.58.030 (Points of Measurement) of this Chapter, using either seismic or electronic vibration measuring equipment. Vibrations occurring at higher than 50 CPS frequency of a periodic vibration shall not induce accelerations exceeding 0.001g. Single impulse periodic vibrations occurring at an average interval greater than five minutes shall not induce accelerations exceeding 0.01g.*
>
> *B. Uses, activities, and processes shall not generate vibrations that cause discomfort or annoyance to reasonable persons of normal sensitivity, or which endanger the comfort, repose, health, or peace of residents whose property abuts the property line of the parcel.*
>
> *C. Uses shall not generate ground vibration that interferes with the operations of equipment and facilities of adjoining parcels.*

D. Vibrations from temporary construction/demolition and vehicles that leave the subject parcel (e.g., trucks, trains, and aircraft) are exempt from the provisions of this Section. (Ord. 1501 § 1, 2011).

Additionally, the Project would comply with General Plan Update Action S-6c, which requires notifying neighbors of scheduled construction activities and scheduling construction activities with the highest potential to produce perceptible vibration to hours with the least potential to affect nearby receptors. The Project would also be subject to General Plan Update Action S-6j, which requires new residential projects located adjacent to major freeways to follow the FTA screening distance criteria to ensure that groundbourne vibrations do not exceed acceptable levels. Therefore, compliance with Section 17.58.070 of the Manteca Municipal Code, General Plan Update Action S-6c, and General Plan Action S-6j would ensure that perceptible construction vibration would be kept to a minimum and impacts would be less than significant.

Level of Significance Before Mitigation
Less Than Significant Impact.

Mitigation Measures
No mitigation is necessary.

Level of Significance After Mitigation
Less Than Significant Impact.

Impact NOI-3	**For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the Project area to excessive noise levels?**

Impact Analysis
The Project site is approximately 8.2 miles southeast of the Stockton Metropolitan Airport and approximately 8.6 miles northeast of the New Jerusalem Airport. Therefore, the Project would not result in excessive noise for people residing or working in the Project area and there would be no impact.

Level of Significance Before Mitigation
No Impact.

Mitigation Measures
No mitigation is necessary.

Level of Significance After Mitigation
No Impact.

3.14 POPULATION AND HOUSING

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

3.14.1 Environmental Setting

The General Plan Update EIR identifies that the population of Manteca in 2020 was 84,800 residents (City of Manteca 2022a). As of January 1, 2023, DOF estimates the City had a population of 88,803 residents (DOF 2023). The General Plan Update accounts for development to its horizon year of 2040, which estimates full buildout of the General Plan Update would accommodate up to 38,103 housing units and 28,713,612 square feet of non-residential building square footage. This new growth may increase the City's population by approximately 38,004 residents and 3,469 employees for a total of approximately 121,168 residents and 27,448 jobs (City of Manteca 2022a).

3.14.2 Previous Environmental Analysis

City of Manteca General Plan Update EIR

The General Plan Update provides the framework for the City's plan for growth and development, including new businesses, expansion of existing businesses, and new residential uses. At full buildout, the General Plan Update could accommodate up to 38,103 housing units and 28,713,612 square feet of non-residential building square footage. Infrastructure and services would need to be extended to accommodate future growth. However, the General Plan Update includes policies and actions that mitigate environmental impacts associated with growth, such as air quality, noise, traffic, water supply, and water quality effects. The General Plan Update would also provide a variety of housing densities and types that would provide housing opportunities for persons that may be displaced as a result of development. Therefore, the General Plan Update EIR determined impacts associated with population and housing growth from the General Plan Update would be less than significant (City of Manteca 2022a).

3.14.3 Project-Specific Impact Analysis

Impact POP-1	**Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?**

Impact Analysis
The Project would directly induce population growth in the City with the development of 672 multi-family for-rent apartments, 48 for-sale two-family units, and 98 single-family for-sale homes. Additionally, the Project would indirectly induce population growth in the City with the addition of up to 11 staff members. The 11 staff members are anticipated to be a part of the local labor force and would support the two apartment complexes.

The City's General Plan Update EIR identifies an average household size of 3.18 persons per household in 2020 (City of Manteca 2022a) for single-family and two-family housing typologies. The City of Manteca Parks and Recreation Master Plan identified an average household size of 2.2 persons per household (City of Manteca 2016b). Using an average household size of 3.18 persons per household for the single-family (98 units) and two-family (48 units) components, and 2.2 people per household for the multi-family component (672 units), the Project's development of 818 new housing units would result in an increase of 1,943 residents. The General Plan Update EIR identifies that the population of Manteca in 2020 was 84,800 residents and the DOF estimates the current population of Manteca as of January 2023 to be 88,803 residents (City of Manteca 2022a, DOF 2023). The addition of 1,943 new residents from Project buildout would result in a 2.2 percent increase from the current 2023 population estimates. The City's population is anticipated to increase to 121,168 residents from buildout of the General Plan Update and the estimated Project residents would represent 1.6 percent of the anticipated City population at buildout of the General Plan Update. The General Plan Update estimates full buildout would generate 27,448 jobs. The Project would generate up to 11 staff members to support the two apartment complexes, which would represent 0.04 percent of the anticipated number of jobs under the General Plan Update.

The new residents and employees resulting from the Project would result in a minimal increase in the City's future growth forecasts and the projected increase would be consistent with the City's population growth projections anticipated by the General Plan Update. Therefore, the Project would not induce substantial population growth in the area and would have a less than significant impact.

Level of Significance Before Mitigation
Less Than Significant Impact.

Mitigation Measures
No mitigation is necessary.

Level of Significance After Mitigation
Less Than Significant Impact.

Impact POP-2	**Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?**

Impact Analysis

The Project site is vacant and does contain any existing units used for residential purposes. Therefore, the Project would have no impact related to the displacement of existing people or housing.

Level of Significance Before Mitigation

No Impact.

Mitigation Measures

No mitigation is necessary.

Level of Significance After Mitigation

No Impact.

3.15 PUBLIC SERVICES

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

3.15.1 Environmental Setting

Fire Protection

The Manteca Fire Department (MFD) provides fire and emergency medical services to over 17 square miles of the City. The MFD maintains a goal for the initial company of three firefighters to arrive on scene for fire and emergency medical services incidents within 5 minutes 90 percent of the time. According to the General Plan Update EIR, MFD is currently meeting the response effectiveness goal (City of Manteca 2022a). The nearest fire station to the Project site is Manteca Fire Station 241, located at 290 South Powers Avenue, approximately 2.2 miles northeast of the Project site.

Police Protection

The Manteca Police Department (MPD) provides law enforcement and police protection services throughout the City. MPD is organized into two divisions – Operations and Services. The operations division includes all uniformed officers and their support teams. The services division includes all the teams and units that support the line police function of the MPD. These teams include dispatch, records, property and evidence, crime analysis, and animal services, as well as detectives, school resource officers, gang unit, and street crimes unit. In addition, MPD operates a public affairs unit. Law enforcement personnel are dispatched out of one main MPD police station located at 1001 West Center Street, approximately 2.2 miles northwest of the Project site. In 2021, the average response time for Priority 1 calls was 1 minute and 12 seconds, 13 minutes and 6 seconds for Priority 2 calls, and 27 minutes and 7 seconds for Priority 3 calls (City of Manteca 2022a).

Schools

The City is mainly served by the Manteca Unified School District (MUSD). A small portion southeast of the City is served by the Ripon Unified School District (City of Manteca 2022a). The Project would be served by MUSD which provides school services for grades K-12 within the communities of Manteca, Lathrop, Stockton, and French Camp (City of Manteca 2022a). Students generated from the Project development would be within the boundaries of the Lincoln Elementary School which serves K-8th graders and Manteca High School which serves 9th -12th graders (MUSD 2024).

Parks

The City currently manages more than 483 acres of parks, facilities, trails and recreation lands, including 405 acres of community, neighborhood, and special use parks and the 101-acre Manteca Park Golf Course (City of Manteca 2022a). The City is slightly deficient in meeting the park service standards for the community parkland category but exceeds the standards for the neighborhood and special use parkland categories (City of Manteca 2022a).

The nearest parks are Terra Bella Park, Paseo Circle Park, and Woodward Park, located within 0.5-mile of the Project site. Additionally, the City is located in the Sacramento-San Joaquin Delta, which contains several regional recreational areas and facilities. The nearest regional facilities include the 9.85-acre Dos Reis Regional Park located approximately 9.5 miles northwest of the Project site, and the 3.7-acre Mossdale Crossing Regional Park located approximately 7.5 miles west of the Project site.

Other Facilities

Other public facilities within the City include the Manteca Branch Library, Manteca Senior Center, and Manteca hospitals and medical facilities. The Manteca Branch Library is located at 320 West Center Street, approximately 1.8 miles northwest of the Project site. The Manteca Senior Center is located at 295 Cherry Lane, approximately 3 miles northwest of the Project site. The nearest medical facility is Kaiser Permanente Manteca Medical Center located at 1777 West Yosemite Avenue, approximately 2 miles northwest of the Project site.

3.15.2 Previous Environmental Analysis

City of Manteca General Plan Update EIR

As discussed in the General Plan Update EIR, new development and growth facilitated by the General Plan Update would result in increased demand for public services, including fire protection, law enforcement, schools, parks, libraries, and other public and governmental services. The General Plan Update EIR is a programmatic document and does not evaluate the environmental impacts of any specific developments, including the expansion of public facilities. However, the General Plan Update includes policies and actions to ensure that public services are provided at acceptable levels. Any future development under the General Plan Update would be required to comply with regulations, policies, and standards included in the General Plan, and subject to review for site-specific impacts (City of Manteca 2022a). Therefore, the General Plan Update EIR determined impacts related to the provision and need for public facilities to be less than significant (City of Manteca 2022a).

3.15.3 Project-Specific Impact Analysis

Impact PUB-1	**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?** **Other public facilities?**

Impact Analysis

Fire Protection

According to the General Plan Update EIR, MFD is currently meeting their response effectiveness goal of arriving on scene within 5 minutes 90 percent of the time (City of Manteca 2022a). The Project consists of an 818 residential unit housing development, including 672 multi-family for-rent apartments, 48 for-sale two-family units, and 98 single-family for-sale homes. As discussed in Section 3.11, Land Use and Planning, full build-out of the Project is estimated to generate approximately 1,943 residents and 11 staff members for the multi-family component, which have been accounted for in the City's General Plan Update EIR estimate of 121,168 residents and 27,448 jobs by 2040.

Additionally, the Project site is located in an urbanized portion of the City already served by the MFD. The Project would comply with the California Fire Code and include site-specific design features such as installing automatic sprinkler systems within the buildings and fire hydrants for fire suppression, providing adequate emergency access, requiring structures to be built with approved building materials. The Project would also be required to pay development fees in accordance with the development fee schedule in the Manteca Municipal Code. Payment of the required development fees would offset the increased demand for fire protection service associated with the Project. Therefore, the Project would not result in the construction of new or expansion of existing fire protection facilities and the impacts would be less than significant.

Police Protection

The Project is within an urbanized area and already served by the MPD. At full build-out, the Project would generate up to 1,943 residents and 11 staff members for the multi-family component, which have been accounted for in the City's General Plan Update EIR estimate of 121,168 residents and 27,448 jobs by 2040. The Project would be required to pay development fees in accordance with the development fee schedule in the Manteca Municipal Code. Payment of the required development fees would offset the increased demand for police protection services associated with the Project. Therefore, the Project would not result in the construction of new or expansion of existing police protection facilities and the impacts would be less than significant.

Schools

According to MUSD, Lincoln Elementary School had a total enrollment of 645 students in the 2022-2023 school year with a capacity of 847 students and Manteca High School had a total enrollment of 1,811 students with a capacity of 2,412 students (MUSD 2022a, 2022b). MUSD published the 2022-2032 Student Projections report prepared by Davis Demographics which includes student yield factors separated by development type and school grades (MUSD 2022c). Using these student yield factors, the Project would result in an increase of 50 K-6th grade students, 8 7th-8th grade students, and 108 9th-12th grade students. In total, the Project would result in an increase of approximately 166 new students, as shown below in Table 3.15-1. The 166 new students would represent 0.11 percent of the combined 2022-2023 existing student population at the two schools. These figures suggest that MUSD currently has capacity to accommodate the estimated enrollment growth resulting from the Project.

Table 3.15-1: Estimated Student Population from Project Development

Unit Type	Yield factor			Number of Units	Number of Students			Total Students
	K-6	7-8	9-12		K-6	7-8	9-12	
Single-Family	0.310	0.072	0.135	98	30	7	13	50
Multi-family	0.107	0.023	0.046	48	5	1	2	8
Apartment	0.099	0.020	0.041	672	67	13	28	108
Total	**--**	**--**	**--**	**818**	**102**	**21**	**43**	**166**

Note:
The 2019 Student Yield Factors were used due to abnormal enrollment patterns in 2020 due to COVID-19 pandemic.

On August 2, 2022, MUSD provided a comment letter indicating the Project would impact MUSD central facilities if not adequately mitigated. The General Plan Update EIR identifies that under SB 50 (signed in 1998), school districts may collect fees to offset the costs associated with increasing school capacity as a result of residential development. Under the terms of this statute, payment of statutory fees by property owners or property developers is considered to mitigate in full, for the purposes of CEQA. Therefore, the Project would not result in the construction of new or expansion of existing school facilities and with the payment of fees, the impacts would be less than significant.

Parks

The City manages more than 483 acres of parks, facilities, trails and recreational lands, including 405 acres of community, neighborhood, and special use parks and the 101-acre Manteca Park Golf Course. According to the City's General Plan Update EIR, the City is slightly deficient in meeting the park service standards for the community parkland category but exceeds the standards for the neighborhood and special use parkland categories (City of Manteca 2022a).

The Project would increase demand on parks with the addition of approximately 1,943 residents and 11 staff members for the multi-family component. However, the Project includes development of a 1.93-acre public open space area that would be accessible to all residents and visitors of the area. The public open space area would be central to the development and would provide open space designated for public use in the same way as a public park. The public open space would provide green lawns and space for active

and passive uses for all visitors, including amenities such as a picnic area with shade canopy, active recreation court with cricket pitch, kids play area, multi-use pathways, strolling pathways and a flex court.

In addition, the Project would provide private backyard and side yard space areas for the single-family and two-family components. The multi-family components would also include private and common areas, such as private balconies, landscaped paseos and open space, as well as two community gardens and orchard planting areas to encourage onsite urban agricultural activities. The Project would also be required to pay development fees in accordance with the development fee schedule in the Manteca Municipal Code. Payment of the required development fees and onsite open space areas would offset the increased demand on parks. Therefore, impacts on park facilities would be less than significant.

Other Public Facilities

Other public facilities within the City include the Manteca Branch Library, Manteca Senior Center, and Manteca hospital and medical facilities. At full build-out, the Project would generate up to 1,943 residents and 11 staff members for the multi-family component, which have been accounted for in the City's General Plan Update EIR estimate of 121,168 residents and 27,448 jobs by 2040. The Project would be required to pay development fees in accordance with the development fee schedule in the Manteca Municipal Code. Payment of the required development fees would offset demand on other public facilities. Therefore, with the payment of required fees, the Project would not result in the construction of new or expansion of existing public facilities and there would be a less than significant impact.

Level of Significance Before Mitigation
Less Than Significant Impact.

Mitigation Measures
No mitigation is necessary.

Level of Significance After Mitigation
Less Than Significant Impact.

3.16 RECREATION

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

3.16.1 Environmental Setting

The City owns and operates three categories of parks: community, neighborhood, and special use parks. The General Plan Update EIR identified that the City has a park service standard of 3 acres per 1,000 residents for neighborhood parks, 1 acre per 1,000 residents for community parks, and 1 acre per 1,000 residents for special use facilities. This total ratio is further broken down into three types of parks: 3.02 acres of neighborhood park, 0.93 acres of community park, and 1.08 acres of special use facilities per 1,000 residents. The City is slightly deficient in meeting the park service standards for the community parkland category but exceeds the standards for the neighborhood and special use parkland categories (City of Manteca 2022a).

The nearest parks are Terra Bella Park, Paseo Circle Park, and Woodward Park, located within 0.5-mile of the Project site. Additionally, the City is located in the Sacramento-San Joaquin Delta, which contains several recreational areas and facilities, primarily for water-based recreation. Regional County parks include the 9.85-acre Dos Reis Regional Park located approximately 9.5 miles northwest of the Project site, and the 3.7-acre Mossdale Crossing Regional Park located approximately 7.5 miles west of the Project site.

3.16.2 Previous Environmental Analysis

City of Manteca General Plan Update EIR

As discussed in the General Plan Update EIR, growth accommodated under the General Plan Update would include a range of uses that would increase demand for parks and recreation facilities. The General Plan Update EIR is a programmatic document and does not evaluate the environmental impacts of any specific developments, including parks. However, the General Plan Update includes policies and actions to ensure that parks and recreation facilities are adequately maintained and improved to serve both existing and planned growth. Any future development under the General Plan Update would be required to comply with regulations, policies, and standards included in the General Plan, and subject to review for site-specific impacts. Therefore, the General Plan Update EIR determined impacts on parks and recreational facilities would be less than significant (City of Manteca 2022a).

3.16.3 Project-Specific Impact Analysis

Impact REC-1	**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?**

Impact Analysis
As discussed in Section 3.15, Public Services, the Project would result in increased use of existing parks and recreational facilities. The Project would be required to pay a parks impact fee in accordance with the development fee schedule in the Manteca Municipal Code. The Project would also include a 1.93-acre public open space area that would be accessible to all residents and visitors of the area. The public open space area would be central to the development and would provide open space designated for public use in the same way as a public park. The public open space would provide green lawns and space for active and passive uses for all visitors, including amenities such as a picnic area with shade canopy, active recreation court with cricket pitch, kids play area, multi-use pathways, strolling pathways and a flex court.

In addition, the Project would provide private backyard and side yard space areas for the single-family and two-family components. The multi-family components would also include private and common areas, such as private balconies, landscaped paseos and open space, as well as two community gardens and orchard planting areas to encourage onsite urban agricultural activities. The development of the onsite private and public open space areas would reduce impacts on existing neighborhood and regional parks or other recreational facilities as the residents from the Project would likely use the onsite private and public open space areas rather than traveling to other parks. With the payment of required fees and development of public and private open space areas, the Project would not result in an increased use of existing parks or other recreational facilities such that substantial physical deterioration would occur, and the impact would be less than significant.

Level of Significance Before Mitigation
Less Than Significant Impact.

Mitigation Measures
No mitigation is necessary.

Level of Significance After Mitigation
Less Than Significant Impact.

Impact REC-2	**Include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?**

Impact Analysis
The Project includes the development of a 1.93-acre public open space area and private open space areas for the proposed residential components. The potential environmental effects of the planning, construction, and operation of the Project as a whole, including the onsite open space, are being evaluated as part of this analysis. No additional environmental effects would occur beyond those that have already been identified in this analysis, and no additional mitigation is required as a result of the Project's inclusion of open space on the Project site. The Project would not result in the construction or

expansion of offsite recreational facilities. Additionally, the Project would be required to pay a parks impact fee in accordance with the development fee schedule in the Manteca Municipal Code to contribute funding of park acquisition and development of recreational facilities. Therefore, impacts associated with adverse environmental impacts of recreational facilities would be less than significant.

Level of Significance Before Mitigation
Less Than Significant Impact.

Mitigation Measures
No mitigation is necessary.

Level of Significance After Mitigation
Less Than Significant Impact.

3.17 TRANSPORTATION

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

3.17.1 Environmental Setting

The descriptions and analysis in this section are based on information contained in the Local Transportation Assessment (LTA) prepared in March 2023 by Stantec (Appendix H), the City's SB 743 Implementation Policy adopted in September 2022, and the 144-490 Quintal Road Project VMT Analysis Technical Memorandum prepared in February 2023 by Fehr & Peers (Appendix I).

The City of Manteca SB 743 Implementation Policy, which includes TIA Guidelines, and General Plan policies were used for the analysis methodology, performance criteria, and thresholds of significance for transportation impacts. The LTA and VMT analysis for the Project were prepared in accordance with these guidelines.

Road System

The Project site is located at the juncture of Quintal Road, S. Main Street, and E. Atherton Drive in the City of Manteca. Several unpaved roadways extend throughout the site. Quintal Road extends across the northwestern portion of the site and connects to S. Main Street. The following local roadways would serve the Project and the surrounding area:

- **Highway 120** is a freeway that runs in an east-west direction in the vicinity of the Project. It connects Interstate 5 and State Route 99.
- **S. Main Street** is primarily a four-lane, north-south arterial road within the City, with sections of two-lane street at Highway 120.
- **E. Atherton Drive** is a four-lane east-west arterial road.

Active Transportation

Active Transportation includes non-motorized travel such as walking or bicycling. There are three classes of bicycle facilities that currently exist within the City—Class I bicycle path, Class II bicycle lane, and Class III bicycle route. A Class I bicycle path exists east of the Project site. The Project proposes to extend the City's existing Class I bicycle path across the northern frontage of E. Atherton Drive, which would be designed and constructed per the City's standard for a 12-foot Class I bicycle path. The Project also proposes to construct half-street improvements along the eastern frontage of S. Main Street to provide sidewalks per the City's standards. Sidewalks and crosswalks in the surrounding area of the Project site would allow pedestrians to access nearby bus stops, parks, a school, and residential uses.

Transit Facilities

Manteca Transit provides local bus service. There are four bus routes that start and end services at the Manteca Transit Center located on Moffat Boulevard. Route 2 and Route 4 provide service near the Project site. The nearest Route 2 bus stops are located on E. Atherton Road at Tinnin Road west of the site and at Van Ryn Avenue east of the site, with each approximately 0.5-mile from the Project site. The nearest bus stop for Route 4 is located on W. Woodward Avenue at Laurie Avenue, approximately 0.5-mile from the Project site, but without complete sidewalk connectivity. The two routes run throughout the day from 6:00 AM – 7:00 PM. Dial-a-Ride service is also available. The Project would provide a bus stop on E. Atherton Drive along the Project frontage.

Regional transportation service providers consist of Altamont Commuter Express (ACE), Amtrak California, Greyhound Bus lines, Modesto Area Express (MAX), and San Joaquin Regional Transit District (RTD). ACE provides commuter rail service from Stockton to San Jose (in the morning from 4:10 AM to 9:45 AM), and San Jose to Stockton (in the afternoon from 3:35 PM to 8:50 PM), with a Lathrop/Manteca ACE station located approximately 3.75 miles from the Project site.

The Manteca Transit Shuttle runs between the Manteca Transit Center and the Lathrop/Manteca ACE station five times a day between 6:40 AM – 7:45 PM.

San Joaquin County 2022 Regional Transportation Plan and Sustainable Communities Strategy

With the passage of SB 375 in 2008, metropolitan planning organizations were required to develop a SCS. An SCS must demonstrate an ambitious, yet achievable, approach to how land use development and transportation can work together to meet GHG emission reduction targets for cars and light trucks. As the metropolitan planning organization and the regional transportation planning agency for San Joaquin County, the SJCOG has developed a RTP that incorporates an SCS.

The San Joaquin County 2022 RTP/SCS provides a sustainability vision through the year 2046 that recognizes the significant impact the transportation network has on the region's public health, mobility, and economic vitality. As the region's comprehensive long-range transportation planning document, the plan serves as a guide for achieving public policy decisions that will result in balanced investments for a wide range of multimodal transportation improvements (SJCOG 2022).

City of Manteca Senate Bill 743 Implementation Policy

The City of Manteca SB 743 Implementation Policy (July 2022) was formally adopted on September 15, 2022 (City of Manteca 2022b). It provides guidance to City staff, applicants, and consultants on the requirements to evaluate transportation impacts for projects in the City under CEQA. A project will not require a detailed VMT analysis if it meets at least one of the City's five screening criteria:

1. Small projects
2. Provisions of affordable housing
3. Local-serving retail
4. Project located in a High-Quality Transit Area
5. Project located in low VMT area

If the project does not meet any of the screening criteria, the City has adopted VMT significance thresholds of 15 percent below existing City-wide baseline VMT per dwelling unit for residential land uses, or per employee for employment related land uses. If the project VMT exceeds the threshold of significance (i.e., if it exceeds 85 percent of the baseline VMT), the impact is considered significant. However, the City's SB 743 Implementation Policy indicates that although a project may exceed threshold levels under existing conditions, as development occurs around the project, the project can assist the City in achieving the VMT reduction goals. In these cases, the project is considered consistent with the City's VMT reduction goals (City of Manteca 2022b).

3.17.2 Previous Environmental Analysis

City of Manteca General Plan Update EIR

According to the General Plan Update EIR, implementation of the General Plan Update could lead to increases in the city's population and employment that would increase the demand for pedestrian and bicycle facilities and transit facilities and services. The General Plan Update includes policies and actions to help make the circulation system, including transit, bicycle, and pedestrian facilities, consistent with applicable programs, plans, policies, and ordinances and address the needs of growth accommodated by the General Plan Update. However, the City cannot demonstrate definitively that implementation of the policies and actions would reduce collisions to the degree that it meets the threshold of no conflict with a program, plan, policy, or ordinance addressing the circulation system. The General Plan Update is a program level document, and hazards would be assessed at the project level. Therefore, the General Plan Update EIR determined impacts would be significant and unavoidable (City of Manteca 2022a).

According to the General Plan Update EIR, employment-related land uses would exceed the City's VMT threshold of 85 percent of baseline conditions with implementation of the General Plan Update (Alternative D). However, residential-related land uses would not exceed the City's VMT threshold of 85 percent of baseline conditions with implementation of the General Plan Update (Alternative D). This is due to the change in the balance between jobs and housing in Manteca. In the future, fewer residents are expected to leave the City for employment, reducing VMT per dwelling unit, but more employees and customers are expected to travel to employment centers, increasing VMT per employee (City of Manteca

2022a). If such employment growth does not occur, actual VMT per dwelling unit could be higher, and VMT per employee could be lower, than estimated for Alternative D buildout conditions. Implementing policies and actions from the General Plan Update would help to reduce VMT through encouraging non-vehicle transportation modes, expanded transit services, deployment of affordable fueling/charging stations for zero emission vehicles, and developing transportation demand management program requirements including measures to reduce VMT associated with new development. These policies and actions which lead to a reduction in VMT would also result in an associated decrease in GHG emissions. However, reductions in VMT per employee from 15 to 51 percent would be required to achieve the City's VMT threshold of 85 percent of baseline conditions. The General Plan Update EIR determined that the City at this time cannot demonstrate that VMT would be reduced to the degree that it meets these thresholds. The feasibility and effectiveness of a local or regional VMT impact bank or exchange is unknown at this time. Therefore, the General Plan Update EIR determined impacts related to VMT would be significant and unavoidable (City of Manteca 2022a).

3.17.3 Project-Specific Impact Analysis

The VMT analysis is prepared in support of the Project's CEQA documentation and complies with the updated CEQA guidelines that incorporates the requirements of SB 743. SB 743 required OPR to establish guidelines under CEQA for identifying and mitigating VMT transportation impacts. Generally, SB 743 moves away from using delay-based LOS as the metric for identifying a significant impact and instead uses VMT. See detailed discussion in the 144-490 Quintal Road Project VMT Analysis Technical Memorandum prepared by Fehr & Peers (Appendix I).

The City of Manteca adopted an SB 743 Implementation Policy with new TIA guidelines in September 2022. The methodology and threshold of significance identified in the TIA guidelines are used in this analysis.

Screening Criteria

Per OPR's Technical Advisory recommendations, local agencies have the option to utilize screening criteria prior to conducting a full VMT analysis to determine if a project would have a less than significant impact on VMT. The screening criteria from the City's TIA guidelines were used to determine if a detailed VMT analysis is required. The screening criteria is based on factors that include project size, affordable housing provision, locally serving retail, transit proximity and areas of low VMT, as shown in Table 3.17-1.

Table 3.17-1: Project Screening Criteria and Threshold

Category	Criteria/Screening	Threshold	Project Screened? (Yes/No)
Small projects Screening	Small projects can be screened out from completing a full VMT analysis.	If the project is consistent with the City's General Plan and generates less than 1,000 trips per day, or if the project is not consistent with the City's General Plan and generates less than 500 trips per day is assumed to have a less than significant impact.	No
Affordable Housing Screening	Affordable housing in high quality transit area can be screened out from completing a full VMT analysis.	If the project is comprised with a high proportion of affordable housing and is located in high quality transit areas, then the portion that is affordable is assumed to have a less than significant impact.	No
Locally Serving Retail Screening	Retail projects that are locally serving can be screened out from completing a full VMT analysis.	A project that proposes locally serving retail uses that are 125,000 square feet or less.	No
High Quality Transit Area Screening	Projects within ½ mile of a major transit stop or a stop located along a high-quality transit corridor generally reduce VMT and therefore can be screened out from completing a full VMT analysis.	If the project is within ½ mile of the City's Downtown transit Center or the Altamont Commuter Express Manteca/Lathrop station, the project is assumed to have a less than significant impact. The project should generally also meet the following criteria: FAR >= 0.75 Not provide more parking than required by County Be consistent with the regional SCS Not replace existing affordable units with a smaller number of moderate to high-income units	No
Low VMT Area Screening	Projects that are located in a low VMT Area can be screened out from completing a full VMT analysis.	Residential or employment projects located in areas that generate low VMT below City's adopted thresholds	No

The Project would generate more than 1,000 trips per day. The Project does not include any retail uses and is not located in a low VMT area or near a High-Quality transit area. The Project does not comprise of any affordable units. Since the Project does not meet any of the screening criteria, a detailed VMT analysis has been conducted as discussed below.

VMT Impact Criteria

City criteria states that a project would result in a significant impact if it would generate VMT that exceeds 85 percent of the baseline, with the baseline defined as the existing average VMT per household in the City. Table 3.17-2 shows the baseline city-wide VMT and thresholds of significance for single-family and multi-family residential developments. The baseline city-wide average VMT for a single-family household is 103.8 and 78.6 for a multi-family household. The threshold of significance (85 percent of baseline) is 88.2 for a single-family household and 66.8 for a multi-family household.

Table 3.17-2: City VMT Threshold of Significance

Land Use	Units	2019 Baseline	85% of Baseline
Single-family residential	VMT per dwelling unit	103.8	88.2
Multi-family residential	VMT per dwelling unit	78.6	66.8

Source: City of Manteca SB 743 Implementation Policy, 2022b

Impact TRANS-1 Conflict with program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities?

Impact Analysis

The Project would not conflict with the General Plan Circulation Element, any program plan, ordinance, or policy addressing the circulation system, including the San Joaquin County 2022 RTP/SCS. The Project does not propose to amend or adjust roadway classifications or any planned improvements to the roadway network, transit routes, or bicycle network as identified in the General Plan Update.

Construction vehicles associated with the Project would cause a temporary increase in traffic due to the additional number of vehicles on the roads; traffic levels would, however, remain within acceptable limits in the context of road capacities and LOS. All construction materials would be stored onsite, and construction of the Project is not anticipated to require road closures. Construction of the Project would, therefore, not conflict with a program plan, ordinance, or policy related to the circulation system, including transit, roadway, bicycle, and pedestrian facilities.

The Project site is located within 0.5-mile of the nearest bus station on W. Atherton Drive. The Project would construct improvements to adjacent and new roads, streets, parking, driveways, frontage improvements, and landscaping. The Project would provide landscaping throughout the site. Trees and landscaping would be located along sidewalks, walkways, and medians throughout the site and along the Project's S. Main Street and E. Atherton Drive frontages. The Project would construct a bus stop on E. Atherton Drive along the Project frontage.

On S. Main Street, the Project would construct a new northbound lane of travel along S. Main Street between E. Atherton Drive and Highway 120 right-of-way. This configuration consists of three vehicle lanes in the northbound direction, a sidewalk, and a raised median between E. Atherton Drive and the Highway 120 eastbound ramps intersection.

Access to the Project site would be provided via three new intersections at E. Atherton Drive and a fourth via the existing Quintal Road and S. Main Street intersection. Access to and from the Project site would be right-turn-in and right-turn-out-only from S. Main Street at Quintal Road. There would be no left-turn-in or -out onto S. Main Street from Quintal Road as a median on S. Main Street would block access.

The entrance to the Phase II apartment complex from S. Main Street would be gated and only accessible to residents. The Phase I apartment complex would be accessible via two gated entrances, located off the new Buena Vista Road extension. In addition to providing access to the Project site, the extension of Buena Vista Drive would provide direct access between E. Atherton Drive and the existing residential neighborhood located to the south of the Project site.

The Project would install a new traffic signal at the intersection of E. Atherton Drive and Buena Vista Road to provide access to the northern and southern portions of the Project site. Additionally, Street D would provide secondary access from E. Atherton Drive for the Phase III single-family and two-family homes. Street D would be a stop-controlled intersection and would have limited turn in/turn out ability due to the existing central median along E. Atherton Drive.

The extended Buena Vista Road segment would have an 80-foot right-of-way. All other proposed internal drive lanes and residential streets would range from 20 to 26 feet in width in accordance with the City's requirements to provide access for emergency fire apparatus.

Pedestrian movement would be enhanced by providing a new crosswalk at E. Atherton Drive and Buena Vista Road. The Project would also construct pathways throughout the development to access the public open space and surrounding street network.

Class I bicycle lanes comprise the existing bicycle facilities located in the vicinity of the Project site. The Project proposes to extend the City's existing Class I bicycle path along the northern frontage of E. Atherton Drive. The extended Class I bicycle path would be designed and constructed per the City's standard for a 12-foot Class I bicycle lane.

The above-mentioned roadway improvements, including the site access improvements, would not cause any conflicts with other improvements planned for the area. As mentioned above, operation of the Project would include amenities and site improvements for bicyclists, pedestrians, and transit. As a result, the Project would not create hazards or barriers for pedestrians, bicyclists, or local transit service.

Therefore, operation of the Project would not conflict with an applicable program plan, ordinance, or policy establishing measures of effectiveness for the performance of the circulation system. This impact would be less than significant.

Level of Significance Before Mitigation
Less Than Significant Impact.

Mitigation Measures
No mitigation is necessary.

Level of Significance After Mitigation
Less Than Significant Impact.

Impact TRANS-2	**Conflict or be inconsistent with CEQA Guidelines Section 15064.3, Subdivision(b)?**

Impact Analysis
According to CEQA Guidelines Section 15064.3 Subdivision (b)(1), VMT exceeding an applicable threshold of significance may indicate a significant impact. Projects that decrease VMT in the Project area compared to existing conditions should be considered to have a less than significant transportation impact. Using methodology and the thresholds of significance identified in the City of Manteca's SB 743 Implementation Policy TIA guidelines, the Project is expected to have a less than significant impact.

VMT Analysis

Table 3.17-3 shows a comparison of the Project generated VMT under existing conditions and the General Plan Update (Alternative D) conditions to the City's VMT threshold of significance. The City of Manteca has selected General Plan Update (Alternative D) to be the preferred buildout scenario. The General Plan Update (Alternative D) Buildout Scenario Travel Forecasting Model (TFM) was used to forecast the Project's weekday daily home-based VMT per single-family and multi-family dwelling unit under cumulative General Plan Update (Alternative D) conditions. This scenario of the TFM incorporates land use data (dwelling units and employment) and reflects the City's jobs-housing balance, internal trips, internal-to-external trips, external-to-internal trips, and external-to-external trips under cumulative conditions where the General Plan Update (Alternative D) is built out. This scenario also incorporates roadway network (lanes, speed, capacity class) based on the General Plan Update (Alternative D), the City of Manteca Public Facilities Implementation Plan, and the SJCOG RTP/SCS Project List. As discussed, the General Plan Update EIR determined that buildout of new development under the General Plan Update (Alternative D) would result in employment-related land uses exceeding the City's VMT threshold of 85 percent of baseline conditions. However, residential-related land uses would not exceed the City's VMT threshold of 85 percent of baseline conditions with the General Plan Update (Alternative D) due to the change in the balance between jobs and housing in Manteca.

As summarized in Appendix I, for the Project VMT analysis, the TFM's land use and roadway network inputs were updated to reflect the Project's proposed land use and driveway locations. The Project is represented by a traffic analysis zone. The TFM applies the trip generation and forecasted distribution pattern under the General Plan Update (Alternative D) and outputs total daily VMT generated by the Project traffic analysis zone, for all trip purposes and for the entire journey's length.

Table 3.17-3: VMT Analysis

Scenario	Single-Family and Two-Family		Multi-Family	
	VMT per Single-Family Household	Compared to Threshold of Significance	VMT per Multi-Family Household	Compared to Threshold of Significance
Baseline (2019) Citywide VMT[1]	103.8	-	78.6	-
Threshold of Significance[2]	88.2	-	66.8	-
Existing Baseline Project-Generated VMT	106.6	+20.8%	83.3	+24.7%
Project-Generated VMT + General Plan Update (Alternative D) [3]	78.9	-10.6%	61.7	-7.7%

Source: Fehr & Peers, Stantec

[1]Baseline = existing city-wide average VMT per household

[2]Threshold of significance = baseline minus 15%

[3] This scenario represents the Project's VMT under the General Plan Update as shown in Table 3-2 of the LTA (Appendix I)

As shown in Table 3.17-3, under existing conditions with an average VMT of 106.6 per single-family household, the proposed Project's single-family and two-family homes would exceed the City's threshold of significance by 20.8 percent. With an average VMT of 83.3 per multi-family household, the proposed Project's multi-family homes would exceed the City's threshold of significance by 24.7 percent under existing conditions. However, the General Plan Update EIR and the City's SB 743 Implementation Policy

indicates that although a project may exceed threshold levels under existing conditions, as development occurs around the project, the project can assist the City in achieving the VMT reduction goals (City of Manteca 2022a, City of Manteca 2022b). This occurs due to factors such as an improvement in the citywide jobs-housing balance.

The General Plan Update identifies a substantial increase in employment and commercial land use within the City, which results in shorter travel distances for residents when accessing jobs and services. Under the General Plan Update buildout conditions, the Project would generate an estimated average of 78.9 VMT per single-family dwelling unit, which is 10.6 percent below the single-family threshold of significance. The Project would generate 61.7 VMT per multi-family dwelling unit, which is 7.7 percent below the multi-family threshold of significance. Additionally, various design features that help reduce VMT are included as part of the Project, such as the following:

- Improve Street Connectivity
- Provide Pedestrian Network Improvement
- Construct or Improve Bike Facility
- Expand Bikeway Network
- Implement Transit-Supportive Roadway Treatments

The Project would generate VMT per dwelling unit that is less than 85 percent of the established baseline city-wide average VMT under cumulative conditions. Furthermore, the proposed land use is consistent with the City's overall planning vision, as identified in the General Plan Update, which assumes the site would be developed with a mix of residential uses. The General Plan Update and General Plan Update EIR anticipated development of the Project site as part of the overall evaluation of buildout of the City. The General Plan Update EIR also addressed VMT impacts that would result from new development anticipated under the General Plan Update and provided a discussion of the General Plan policies intended to reduce impacts. However, the General Plan Update EIR determined that the City cannot demonstrate that VMT would be reduced to the degree that it meets these thresholds and impacts related to VMT would be significant and unavoidable. The City certified the General Plan Update EIR, adopted Statement of Overriding Considerations and Findings of Fact, and adopted the General Plan Update on July 18, 2023. The proposed Project is consistent with the General Plan Update policies related to this topic, and within the scope of the development program evaluated under the General Plan Update EIR. Therefore, the proposed Project would not result in a greater VMT impact than what has already been considered in the City's certified General Plan Update EIR.

As the Project is consistent with the findings of the City's certified General Plan Update and General Update EIR, and would generate VMT per dwelling unit that is less than 85 percent of the established baseline city-wide average VMT under cumulative conditions, the impact would be less than significant.

Level of Significance Before Mitigation
Less Than Significant Impact.

Mitigation Measures
No mitigation is necessary.

Level of Significance After Mitigation
Less Than Significant Impact.

Impact TRANS-3	**Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?**

Impact Analysis
The Project design would not substantially increase hazards or results in an incompatible use. The proposed primary access points to the Project site would be via the abandoned but existing Quintal Road and the two new commercial roads that would be located off of E. Atherton Drive that would be constructed for the Project. The Project would construct a new northbound lane of travel along S. Main Street between E. Atherton Drive and Highway 120 right-of-way. The Project would also restripe the same S. Main Street segment in accordance with the new improvements. Additionally, the Project would install a new curb that extends approximately 200 feet east from the S. Main Street and E. Atherton Drive intersection along the north edge of the westbound lane of travel on E. Atherton Drive. The Project would install a new traffic signal at the intersection of E. Atherton Drive and Buena Vista Drive, as it extends north across E. Atherton Drive. Finally, the Project would construct a new minor street stop-controlled intersection at Street D, as it crosses E. Atherton Drive from the northern portion of the Project area to the southern portion of Project area.

The Project also proposes to upgrade the traffic signals at the intersection of S. Main Street and E. Atherton Drive, and both signals at the north and south intersections of S. Main Street and Highway 120 off- and on-ramps with modern traffic signal controllers to appropriately synchronize the timing of the signals of all of the aforementioned signals. Access to/from the Project site would be right-in and right-out from S. Main Street at Quintal Road. No left turn-in or -out onto S. Main Street from Quintal Road would be allowed as a median on S. Main Street would block access. Additionally, the Project proposes to extend a Class I bicycle path along the northern frontage of E. Atherton Drive which would be designed and constructed per the City's standards for a 12-foot Class I bicycle lane.

The proposed street improvements would be designed in accordance with the City's standards and would not introduce hazardous geometric design features, such as sharp curves or dangerous intersections, to the vicinity of the Project site. The Project would not substantially increase hazards to a geometric design feature or incompatible uses and therefore, impacts would be less than significant.

Level of Significance Before Mitigation
Less Than Significant Impact.

Mitigation Measures
No mitigation is necessary.

Level of Significance After Mitigation
Less Than Significant Impact.

Impact TRANS-4 Result in inadequate emergency access?

Impact Analysis
The Project would not modify any existing roadways in such a way that would impede emergency access. Primary site access to the new developments would be through the abandoned but existing Quintal Road, located off S. Main Street and two new commercial roads located off E. Atherton Drive that would be constructed for the Project. The Project would include three other access points for fire access to the site. Access points to the Project site would meet the City's requirements for fire apparatus access as well as emergency ingress and egress from the Project site. EVA access has been provided, consistent with the Fire Marshall's requirements. The Planning Commission and City engineer would review the proposed residential street patterns to evaluate the accessibility for fire engines and emergency response to ensure that the Project has adequate ingress and egress, setbacks, clearances, turning radii, etc. and does not impede emergency access. Therefore, impacts would be less than significant.

Level of Significance Before Mitigation
Less Than Significant Impact.

Mitigation Measures
No mitigation is necessary.

Level of Significance After Mitigation
Less Than Significant Impact.

3.18 TRIBAL CULTURAL RESOURCES

Would the Project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined by Public Resources Code section 21047 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:				
i) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or	☐	☐	☒	☐
ii) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	☐	☐	☒	☐

3.18.1 Environmental Setting

A Cultural Resources Evaluation was prepared for the Project. Identification efforts included a records search at the Central California Information Center of the CHRIS, and a Sacred Lands files request maintained by the NAHC. The records search included a review of records for the Project area and a surrounding radius of 0.25-mile. A pedestrian survey of the Project area was also completed. The records search, desktop review, Sacred Lands file request, and pedestrian survey did not identify any tribal cultural resources within the Project area. A letter requesting information and consultation with local tribes listed by the NAHC were sent on October 31, 2022 in accordance with AB 52 and SB 18; however, no responses were received.

On June 28, 2024, the City sent updated AB 52 and AB 18 letters to local tribes notifying them that the Project is requesting a General Plan Amendment to re-designate the site to HDR for the proposed multi-family and two-family uses and to LDR for the single-family uses. The Project would also rezone the site to R-3 and R-1 to align with the proposed HDR and LDR land use designations. Pursuant to the statute, tribes are required to respond in writing within 30 days. To date, the City has not received any responses regarding the Project.

3.18.2 Previous Environmental Analysis

City of Manteca General Plan Update EIR

According to the General Plan Update EIR, future development projects could impact unknown archaeological resources, including Native American artifacts and human remains. The General Plan Update EIR determined compliance with the General Plan Update policies and actions, as well as with State and local guidelines would provide an opportunity to identify, disclose, and avoid or minimize the disturbance of and impacts to a tribal cultural resource. Therefore, the General Plan Update EIR determined impacts on tribal cultural resources would be less than significant (City of Manteca 2022a).

3.18.3 Project-Specific Impact Analysis

Impact TRIB-1	**Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to 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 Public Resources Code 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 Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.**

Impact Analysis

There are no known tribal cultural resources within the Project site. However, subsurface construction activities associated with the Project could potentially damage or destroy previously undiscovered unique tribal cultural resources. If undiscovered resources are found, the Project would comply with General Plan Update Action RC-11j which requires the following:

- *If construction or grading activities result in the discovery of significant historic or prehistoric archaeological artifacts or unique paleontological resources, all work within 100 feet of the discovery shall cease, the Development Services Director shall be notified, the resources shall be examined by a qualified archaeologist, paleontologist, or historian for recommended protection and preservation measures; and work may only resume when recommended protections are in place and have been approved by the Development Services Director; and*
- *If construction or grading activities result in the discovery of significant tribal cultural resources, all work within 100 feet of the discovery shall cease, the Development Services Director shall be notified, the resources shall be examined by a qualified archaeologist and Native American tribes on the City's SB 18 and AB 52 list for recommended protection and preservation measures and*

work may only resume when recommended protections are in place and have been approved by the Development Services Director; and

- *If human remains are discovered during any ground disturbing activity, work shall stop until the Development Services Director and the San Joaquin County Coroner have been contacted; if the human remains are determined to be of Native American origin, the Native American Heritage Commission and the most likely descendants have been consulted; and work may only resume when measures to relocate or preserve the remains in place, based on the above consultation, have been taken and approved by the Development Services Director.*

Therefore, the Project would have a less than significant impact on tribal cultural resources with compliance with General Plan Update Action RC-11j.

Level of Significance Before Mitigation
Less Than Significant Impact.

Mitigation Measures
No mitigation is necessary.

Level of Significance After Mitigation
Less Than Significant Impact.

3.19 UTILITIES AND SERVICE SYSTEMS

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

3.19.1 Environmental Setting

Water Supply

Potable Water Supply

The City's water distribution system is supplied by surface water from SSJID's South County Water Supply Project (SCWSP) and local groundwater wells. Implementation of the SCWSP provides for the delivery of treated surface water and has enabled the City to reduce reliance on local groundwater sources and enhance water supply reliability. As identified in the City's 2015 Urban Water Management Plan (UWMP), the City's goal is to limit groundwater use between 47 and 53 percent of total water supply on an annual basis (City of Manteca 2016). In 2015, the City's total potable water use was 11,235 acre-feet per year (AFY) which equates to an average daily use of 10 million gallons per day (mgd) (City of Manteca 2022a).

In 2005, SSJID commissioned the Nick C. DeGroot Water Treatment Plant (WTP) for the SCWSP to provide treated surface water from the Stanislaus River to several cities in south San Joaquin County. The City has a Phase 1 allotment of 11,500 AFY of surface water through the SCWSP, but it has not historically used its full allotment due to system constraints and State and SSJID supply limits in response to drought conditions. Future expansion of the SCWSP would increase the City's maximum Phase 2 allotment to 18,500 AFY, but implementation of Phase 2 has not been initiated. In 2015, the City purchased a total of 5,596 acre-feet of supply from SSJID (City of Manteca 2022a). As part of the General Plan Update, the City is also updating their Water Master Plan (WMP). Table 3.19-1 summarizes the City's historic, current, and the updated WMP's projected water supply and demand under a normal year scenario.

Table 3.19-1: Historical, Current, and Projected Water Demand and Supply

Source	2025	2030	2035	2040	2045
Potable Water[1]	16,982	20,121	22,681	25,566	28,818
Recycled Water[2]	718	2,692	2,693	2,694	2,695
Total Water Demand	**17,700**	**22,813**	**25,374**	**28,260**	**31,513**
Total Water Supply	**21,945**	**27,682**	**29,245**	**37,809**	**39,373**

Source: Appendix J

Recycled Water

The City utilizes recycled water for irrigation and dust control. Recycled water is produced at the City's Wastewater Quality Control Facility (WQCF). The City currently uses undisinfected secondary effluent to irrigate fodder crops in the land adjacent to the WQCF, disinfected tertiary effluent conveyed through a pipeline for irrigation at the Great Wolf Lodge and distributed through a fill station at the entrance of the WQCF for dust control at construction sites. The City is in the process of developing a Reclaimed Water Facilities Master Plan to systematically develop and implement the use of recycled water from the WQCF with phased development/implementation over the next 20 to 25 years (City of Manteca 2022a).

Groundwater

One of the main sources of water supply for the City is groundwater pumped from the Eastern San Joaquin County Groundwater Subbasin. According to the Department of Water Resources, this groundwater basin is critically overdrafted with historical declines averaging 1.7 feet per year. In 2014, State legislature enacted the Sustainable Groundwater Management Act (SGMA) in response to continued overdraft of the State's groundwater resources. The SGMA require the development of a Groundwater Sustainability Plan for each basin to achieve sustainable groundwater use in the basin by 2040. In response to the SGMA, in 2017, the Eastern San Joaquin Groundwater Authority was formed through a joint powers agreement comprised of 16 Groundwater Sustainability Agencies, including the City. In 2019, the Eastern San Joaquin Groundwater Authority completed its first Groundwater Sustainability Plan which presents the projected path to achieve sustainable groundwater management within 20 years of the plan's adoption (City of Manteca 2022a).

As identified in the City's 2015 UWMP, the City's goal is to limit groundwater use to between 47 and 53 percent of total water supply on an annual basis (City of Manteca 2016). The City owns and operates 17 potable groundwater wells and 31 irrigation wells. In 2015, the City's annual groundwater pumped was 7,249 AFY, of which 5,639 AFY was for potable use and 1,610 AFY for irrigation use (City of Manteca 2022a).

Wastewater

Wastewater service is provided by the City via their network of collection infrastructure and the WQCF. The WQCF provides services to the City of Manteca, City of Lathrop, and Raymus Village in San Joaquin County. The municipal wastewater collection system includes 242 miles of sewer mains and 19 pump stations, and the collection system includes gravity flow pipes and force mains. Municipal wastewater is treated at the City's WQCF and per contractual agreement, 8.42 mgd of plant capacity is allocated to the City. The WQCF treats an average dry weather flow of approximately 7.2 mgd and had an average dry weather design capacity of 9.87 mgd. In 2020, the average annual wastewater flow for the City was 7.2 mgd (City of Manteca 2022b).

However, historic water use reductions in the community combined with population growth have increased the concentration of biological oxygen demand and total Kjeldahl nitrogen in the influent wastewater. This essentially makes the incoming wastewater higher strength and makes the overall biological and nitrogen loading on the plant higher even with lower wastewater flows. As a result of these changes, the actual plant capacity is limited by biological and nitrogen loading and equates to an influent flow capacity less than 9.87 mgd. The City is planning to expand the facility from the currently permitted 9.87 mgd to 27 mgd. The various WQCF facilities are designed to be expanded in phases, based on future growth. Proposed treatment improvements identified in the 2006 WQCF Master Plan Update include expansion of the primary, secondary, and tertiary treatment facilities, expansion of the solids handling systems and expansion of the co-generation system to generate electricity from methane produced during the treatment process. However, as identified in the City's General Plan Update EIR, methane generation is no longer used to produce electricity and has now been converted to fueling City garbage trucks (City of Manteca 2022a).

Stormwater Management

The City of Manteca operates and maintains a storm drain system to control stormwater and protect residents and business from flooding and stormwater damage. The City system includes approximately 150 miles of pipelines, 52 pump stations and 54 detention basins (City of Manteca 2022a). 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.

Solid Waste

The City of Manteca Public Works Department, Solid Waste Division provides solid waste collection services for the Manteca area. After the waste is collected, Lovelace Transfer Station is used to process and ship the material to its final destination. The Lovelace Transfer Station is owned and operated by San Joaquin County and also serves most of south San Joaquin County. Recyclables are transported to a small Transfer Station adjacent to Forward Landfill where they are loaded onto larger trucks and taken to

Sacramento Recycling. The majority of Manteca's solid waste is landfilled at the Forward Sanitary Landfill, located north of French Camp Road. Foothill Sanitary Landfill and North County landfill are also employed, but to a much lesser degree (City of Manteca 2022a).

3.19.2 Previous Environmental Analysis

City of Manteca General Plan Update EIR

As future development and infrastructure projects are considered by the City, each project would be evaluated for conformance with the General Plan Update, Manteca Municipal Code, and other applicable regulations to ensure that there is adequate water, sewer, and stormwater drainage and flood control infrastructure available. The projected water demands associated with buildout of the General Plan Update would not exceed the projected available water supplies, and the General Plan Update includes a comprehensive set of goals, policies, and actions to ensure an adequate and reliable source of clean potable water. Full buildout of the development contemplated in the General Plan Update would slightly increase the existing treatment demand at the districts' treatment plants. However, the General Plan Update includes a range of policies designed to ensure adequate wastewater treatment capacity is available for development. The City must also periodically review and update their Wastewater and WQCF Master Plans, and as growth continues to occur within the Planning Area, the City would identify necessary system upgrades and capacity enhancements to meet growth.

The City of Manteca Solid Waste Division provides solid waste hauling services for the City. Solid waste from the City is taken to the Lovelace Materials Recovery Facility and Transfer Station where the County manages and assigns solid waste to either the Forward Landfill, Foothill Landfill, or North County Facility (City of Manteca 2022a). The Forward Landfill was projected to close in 2020 at current acceptance rates due to reaching its permitted size parameters. To increase the lifespan of the landfill, Forward, Inc. is planning to expand its disposal footprint. The City's projected increase in solid waste generation associated with future buildout of the General Plan Update is within the permitted capacity of the Forward Sanitary Landfill expansion. Furthermore, the City can potentially utilize the Foothill Landfill and the North County Landfill as locations for solid waste disposal. As future development and infrastructure projects are considered by the City, each project would be evaluated for conformance with the General Plan Update, Manteca Municipal Code, and other applicable regulations associated with solid waste. Therefore, the General Plan Update EIR determined impacts related to utilities and service systems would be less than significant (City of Manteca 2022a).

3.19.3 Project-Specific Impact Analysis

Impact UTIL-1	**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?**

Impact Analysis

Water

The Project would install new 8-inch water mains throughout the site, which would connect to the existing water mains located along E. Atherton Drive and S. Main Street. The existing water mains located along

E. Atherton Drive and S. Main Street would not require upsizing or relocation to implement the Project. All water distribution improvements for the Project would be constructed and designed in accordance with the City's standards and specifications. As discussed under Impact UTIL-2, the Project's estimated water demand would result in 139,333 gpd or 70 AFY. As discussed in Appendix J, the Project's water demand is included in the City's recent water projections developed as part of the WMP effort. Therefore, the Project would not require the construction or expansion of existing water facilities to serve the new developments.

Additionally, as required by Chapter 13.38, Public Facilities Implementation Fee, of the Manteca Municipal Code, the Project would be required to pay a water facilities development fee to fund its fair share of the costs for infrastructure improvements. Therefore, the Project would not require or result in the relocation or construction of new or expanded water distribution systems and impacts would be less than significant.

Wastewater

The Project would install new 6-inch sanitary sewer mains throughout the site, which would connect to 4-inch private lines that serve each individual proposed structure. The 6-inch sewer mains would ultimately connect to the existing sanitary sewer mains located along E. Atherton Drive and S. Main Street which would not require upsizing or relocation for development of the Project. All sewer distribution improvements would be constructed and designed in accordance with the City's standards and specifications.

The Project is anticipated to generate approximately 119,062 gpd gpd or 133 AFY of wastewater. As discussed under Impact UTIL-3, the WQCF would have sufficient capacity to treat wastewater generated by the Project and would not require the expansion or construction of new wastewater treatment facilities to adequately serve the increased demand.

Additionally, as required by Chapter 13.38, Public Facilities Implementation Program Fee, of the Manteca Municipal Code, the Project would be required to pay a sewer facilities development fee to fund its fair share of costs for infrastructure improvements. Therefore, the Project would not require or result in the relocation or construction of new or expanded wastewater systems and impacts would be less than significant.

Stormwater Drainage

The Project proposes to utilize the existing 2.88-acre detention basin adjacent to the southwest corner of the Project site to provide stormwater detention onsite. The existing detention basin is sized to attenuate a 10-year, 48-hour storm event and designed to empty within a maximum of 96 hours. Flow through planters and bioretention basins would be utilized throughout the site to capture stormwater flows to be conveyed to the 2.88-acre detention basin and City's stormwater system

The Project would tie into the City's existing 48-inch diameter stormwater drainage system, located along E. Atherton Drive. Additionally, the Project would relocate the existing 48-inch diameter SSJID/City dual use lateral line that runs through the northeastern portion of the Project site. The dual use lateral line would be relocated within a new 30-foot easement along Buena Vista Drive, Street B, and Street D before finally tying back into E. Atherton Drive. Stormwater runoff from the site would be conveyed from the flow

through planters and bioretention basin for treatment and detention prior to discharging into the City's stormwater system.

All stormwater infrastructure improvements would be constructed in accordance with City guidelines and requirements and with the use of the detention basin and flow through planters, the Project would not result in increased runoff in a manner that would exceed the City's stormwater system. Stormwater infrastructure improvements included in the Project would adequately convey stormwater flows on and offsite. Therefore, the Project would not require or result in the relocation or construction of new or expanded stormwater systems and impacts would be less than significant.

Other Infrastructure

Although the Project would demand additional energy usage at the site, electrical connections would be made with existing facilities located onsite. The Project would be 100 percent electric and would not require the use of natural gas. The Project would be designed and constructed in accordance with CalGreen and Title 24 energy efficiency standards. Solar panels would be installed on the roofs of the single-family homes and over the covered parking areas for the multi-family developments. The Project would relocate and underground (PG&E Rule 20) approximately 2,000 feet of power lines that extend along Quintal Road and terminate at the intersection of S. Main Street and E. Atherton Drive. No new expanded facilities would be required for electric facilities, and the impact would be less than significant (City of Manteca 2022a).

Level of Significance Before Mitigation
Less Than Significant Impact.

Mitigation Measures
No mitigation is necessary.

Level of Significance After Mitigation
Less Than Significant Impact.

Impact UTIL-2	**Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?**

Impact Analysis
As discussed in Appendix J, as part of the City's WMP update, HydroScience has developed land use-based demand factors using 2020 and 2021 water meter billing data as well as future water demand factors for new residential development. These factors, along with planned upcoming development (including the Project) and land uses presented in the General Plan Update, formed the basis for estimating City-wide potable water demand projections.

As shown in Table 3.19-2, the General Plan Update designates the Project site CMU and MDR, which would demand approximately 77,080 gpd. The Project would develop the site with multi-family units, two-family homes, single-family homes, and a public open space. Based on the proposed use types, the Project's estimated water demand would be approximately 139,333 gpd, resulting in a net increase of approximately 62,253 gpd or 70 AFY.

Table 3.19-2: Existing General Plan Update Land Use Water Demand and Estimated Water Demand for Project

Development Type	Total Units	Total Area (acres)	Land Use	Unit Demand Factor	Total Water Demand (gpd)	Total Water Use (AFY)
Existing Land Use Water Demand based on General Plan Update						
Vacant	--	48	CMU	900 gpd/acre	43,200	48
Vacant		14	MDR	2,420 gpd/acre	33,880	38
Total Existing Land Use Demand	--	--	--	--	**77,080**	86
Estimated Water Demand for Project						
Multi-Family Homes	672	29.9	HDR	2,810 gpd/acre	83,926	94
Two-Family Homes	48	4.9	HDR	2,810 gpd/acre	13,825	15
Single-Family Homes	98	14.3	LDR	370 gpd/du	36,260	41
Public Open Space	--	1.9	PARK	2,600 gpd/acre	5,015	6
Total Project Demand	**818**	**51**	**--**	**--**	**139,333**	**156**
Net Increase					*62,253*	*70*

Notes:

Detention basin, streets, ROW, etc. are not included in calculations as they are not expected to generate any potable water demand.

Source: Appendix J

The Project's increased demand is included in the City's recent projections developed as part of the WMP effort. Pursuant to Section 10910 of the Water Code, a comparison of the City's projected water supplies and demands are presented for a normal year, a single dry year, and multiple dry years during a 20-year period in Table 3.19-3.

Table 3.19-3: City Water Supply and Demand Comparison

			2025	2030	2035	2040	2045
Normal Year		Total Supply	21,945	27,682	29,245	37,809	39,373
		Total Demand	17,700	22,813	25,374	28,260	31,513
		Surplus/ (Shortfall)	**4,245**	**4,869**	**3,871**	**9,549**	**7,860**
Single Dry Year		Total Supply	20,105	25,842	27,405	34,849	36,413
		Total Demand	17,700	22,813	25,374	28,260	31,513
		Surplus/ (Shortfall)	**2,405**	**3,029**	**2,031**	**6,589**	**4,900**
Multiple Dry Years	Year 1	Total Supply	21,945	27,682	29,245	37,809	39,373
		Total Demand	17,700	22,813	25,374	28,260	31,513
		Surplus/ (Shortfall)	**4,245**	**4,869**	**3,871**	**9,549**	**7,860**
	Year 2	Total Supply	21,945	27,682	29,245	37,809	39,373
		Total Demand	17,700	22,813	25,374	28,260	31,513
		Surplus/ (Shortfall)	**4,245**	**4,869**	**3,871**	**9,549**	**7,860**
	Y	Total Supply	20,105	25,842	27,405	34,849	36,413

			2025	2030	2035	2040	2045
		Total Demand	17,700	22,813	25,374	28,260	31,513
		Surplus/ (Shortfall)	**2,405**	**3,029**	**2,031**	**6,589**	**4,900**
	Year 4	Total Supply	20,105	25,842	27,405	34,849	36,413
		Total Demand[2]	17,700	22,813	25,374	28,260	31,513
		Surplus/ (Shortfall)	**2,405**	**3,029**	**2,031**	**6,589**	**4,900**
	Year 5	Total Supply	21,945	27,682	29,245	37,809	39,373
		Total Demand	17,700	22,813	25,374	28,260	31,513
		Surplus/ (Shortfall)	**4,245**	**4,869**	**3,871**	**9,549**	**7,860**

It is estimated Project construction would be complete by July 2028. Assuming implementation of the Project between 2025 and 2030, total demands, including Project demands, would range from 17,700 AFY to 22,813 AFY, which falls within the projected supplies for all normal years. Future development and growth can be accommodated in all dry years through 2045. Therefore, the City would have sufficient water supplies to serve the Project and planned future demands, and impacts would be less than significant.

Level of Significance Before Mitigation
Less Than Significant Impact.

Mitigation Measures
No mitigation is necessary.

Level of Significance After Mitigation
Less Than Significant Impact.

Impact UTIL-3	**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?**

Impact Analysis
As shown in Table 3.19-4, based on the proposed land uses and wastewater generation factors included in the City's General Plan Update, the Project would generate approximately 119,062 gpd or 133 AFY of wastewater.

Table 3.19-4: Project Estimated Wastewater Generation

Development Type	Total Units	Total Area (acres)	Land Use	Wastewater Generation Factor	Total Wastewater Generation (gpd)	Total Wastewater Generation (AFY)[1]
Multi-Family Homes	672	29	HDR	3,060 gpd/acre	88,740	99
Two-Family Homes	48	5	HDR	3,060 gpd/acre	15,300	17
Single-Family Homes	98	14	LDR	1,073 gpd/acre	15,022	17
Total	**818**	**48**	--	--	**119,062**	**133**

Source: City of Manteca 2022a

Notes: AFY is rounded to the nearest whole number.

Municipal wastewater is treated at the City's WQCF and per contractual agreement, 8.42 mgd of plant capacity is allocated to the City and 1.45 mgd is allocated to the City of Lathrop. The WQCF has an average dry weather flow of approximately 7.2 mgd and in 2020, the average annual wastewater flow for the City was 7.2 mgd which is approximately 85.5 percent of the City's allocated capacity (City of Manteca 2022a). The Project would generate approximately 119,062 gpd of wastewater to the WQCF, which is approximately 1.4 percent of the City's 8.42 mgd allocated capacity. Therefore, the WQCF would have capacity to treat wastewater generated by the Project.

Additionally, as required by Chapter 13.38, Public Facilities Implementation Program Fee, of the Manteca Municipal Code, the Project would be required to pay a sewer facilities development fee to fund its fair share of costs to provide for adequate sewer distribution systems within the City. Therefore, impacts to wastewater treatment facilities would be less than significant.

Level of Significance Before Mitigation
Less Than Significant Impact.

Mitigation Measures
No mitigation is necessary.

Level of Significance After Mitigation
Less Than Significant Impact.

Impact UTIL-4	**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?**

Impact Analysis
According to the General Plan Update EIR, the permitted maximum disposal at the Foothill Landfill is 1,500 tons per day and the North County Landfill is 825 tons per day. The remaining capacity of these landfills include 125 million cubic yards of solid waste at the Foothill Landfill, with an estimated cease operation date of 2054, and 35.4 million cubic yards of solid waste at the North County Landfill, which has an estimated cease operation date of 2035 (City of Manteca 2022a). In 2022, the City was estimated to have an annual disposal amount of approximately 112,970 tons. In the same year, the City's residential

population has a disposal rate of approximately 7.1 pounds per person per day (CalRecycle 2024). With an estimated 1,943 new residents, the Project would generate 13,795 pounds of solid waste per day or 6.9 tons per day. The estimated 6.9 tons per day of solid waste generated by the Project would be less than one percent of the maximum permitted throughput received at the landfill. Therefore, there would be sufficient landfill capacity available to accommodate solid waste disposal needs for the Project. The Project would implement and comply with all solid waste reduction measures adopted by the City and incorporate recycling collection areas into the Project. Therefore, the Project would not generate waste that exceeds State or local standards, capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals and the impacts would be less than significant.

Level of Significance Before Mitigation
Less Than Significant Impact.

Mitigation Measures
No mitigation is necessary.

Level of Significance After Mitigation
Less Than Significant Impact.

Impact UTIL-5	**Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?**

Impact Analysis
The Project would comply with all federal, state, and local statutes and regulations related to solid waste, including Manteca Municipal Code Chapter 13.02, Solid Waste Collection and Disposal, which sets forth diversion requirements for residential uses. Therefore, impacts would be less than significant.

Level of Significance Before Mitigation
Less Than Significant Impact.

Mitigation Measures
No mitigation is necessary.

Level of Significance After Mitigation
Less Than Significant Impact.

3.20 WILDFIRE

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

3.20.1 Environmental Setting

The General Plan EIR identifies three areas in the City that are located in a LRA served by MFD. These include a developed area near Airport Way and West Yosemite Avenue, a developed area near East Yosemite Avenue and Austin Road, and a developed area near West Louise Avenue and South Airport Way. There are no SRAs or Federal Responsibility Areas within the vicinity of the Planning Area as identified in the General Plan Update EIR. Manteca is not categorized as a VHFHSZ by CAL FIRE. Additionally, no cities or communities within San Joaquin County are categorized as a VHFHSZ by CAL FIRE (City of Manteca 2022a).

Based on review of CAL FIRE's Fire Hazard Severity Map Viewer, the Project site is not located within an SRA or a VHFHSZ (CAL FIRE 2022). The General Plan EIR identifies that most of the Planning Area is categorized as Urban Unzoned or Non-Wildland/Non-Urban (City of Manteca 2022a). Additionally, based on review of the USFS Wildfire Hazard Potential Map, the Project site is classified as having a very low wildfire hazard fire potential (USFS 2020).

3.20.2 Previous Environmental Analysis

City of Manteca General Plan Update EIR

According to the General Plan Update EIR, the City's Planning Area is not located in or near any SRAs and there are no lands classified as VHFHSZ within or near the Planning Area. Therefore, the General Plan Update EIR determined there would be no impact related to wildfire risks associated with lands in or near SRAs or lands classified as a VHFHSZ (City of Manteca 2022a).

3.20.3 Project-Specific Impact Analysis

Impact WF-1 **If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:**

a) Substantially impair an adopted emergency response plan or emergency evacuation plan?

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

c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?

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

Impact Analysis

The Project site is not located within a SRA or within a VHFHSZ (CAL FIRE 2024). The USFS Wildfire Hazard Potential Map identifies the Project site as non-burnable and with very low wildfire hazard potential (USFS 2020). The Project would connect to the existing network of City streets and include offsite traffic improvements, such as the construction of a new northbound lane of travel along S. Main Street, between E. Atherton Drive and Highway 120 right-of-way, travel lane improvements to the existing eastbound on-ramp to Highway 120, new curb and gutter improvements, and installation of a new traffic signal at the intersection of E. Atherton Drive and Buena Vista Drive. The Project also proposes to upgrade the traffic signals at the intersection of S. Main Street and E. Atherton Drive, and both signals at the north and south intersections of S. Main Street and Highway 120 off- and on-ramps with modern traffic signal controllers. The proposed offsite traffic improvements would be required to comply with Caltrans' requirements and City standards, emergency plans, and procedures, including providing for emergency access. The Project site is relatively flat and not within an area at risk of landslides or flooding. Additionally, the Project would not require the installation or maintenance of associated infrastructure that may exacerbate fire risk or that may result in temporary or ongoing impacts. The Project would comply with General Plan Policies CF-3.4, CF-3.5, and CF-3.6 that are aimed at

maintaining roadways to provide adequate emergency access, complying with the requirements of the California Fire Code, and providing adequate water volumes and water pressure for fire protection. With compliance with the California Fire Code requirements and City standards, including policies and actions from the General Plan Update, no impact from wildfires would occur.

Level of Significance Before Mitigation
No Impact.

Mitigation Measures
No mitigation is necessary.

Level of Significance After Mitigation
No Impact.

3.21 MANDATORY FINDINGS OF SIGNIFICANCE

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

Impact MFS-1	**Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory?**

Impact Analysis

As evaluated in this Tiered ISMND, the Project would not substantially degrade the quality of the environment; substantially reduce the habitat of a fish or wildlife species; cause a fish or wildlife population to drop below self-sustaining levels; threaten to eliminate a plant or animal community; reduce the number or restrict the range of an endangered, rare, or threatened species; or eliminate important examples of the major periods of California history or prehistory. The Project would implement Mitigation Measure BIO-1 to address potential impacts to special-status wildlife species and nesting birds. Additionally, the Project would adhere to General Plan Action RC-11j to reduce impacts related to the inadvertent discovery of cultural resources and human remains to a less than significant level.

Level of Significance Before Mitigation
Potentially Significant Impact.

Mitigation Measures
Mitigation Measure BIO-1 would be required.

Level of Significance After Mitigation
Less Than Significant Impact with Mitigation.

Impact MFS-2	**Does the project have impacts that are individually limited, but cumulative considerable? ("Cumulative considerable" means that the incremental impacts of a project are considerable when viewed in connection with the effects of past projects, the impacts of other current projects, and the impacts of probable future projects)?**

Impact Analysis
A cumulative impact is one that results from the combined effects of past, present, and reasonably foreseeable future projects or activities. CEQA requires the disclosure of cumulative impacts to which the Project would contribute, and the importance of that contribution in the context of the cumulative impact. The General Plan Update EIR evaluated cumulative impacts associated with anticipated growth and development in the City as land use and zoning assumptions. The Project level cumulative impact analysis tiers off the General Plan Update EIR; therefore, the only possible way the Project could result in a new cumulative impact would be from a new source of impact that wasn't previously identified in the General Plan Update EOR. Because this Tiered ISMND incorporates policies and actions from the General Plan Update EIR to address potential impacts, only those new Project impacts that resulted in the need for a new Project-specific mitigation measure should be considered as contributing to the cumulative context of resource impacts. The General Plan Update EIR identified potentially significant impacts and prescribed policies and goals to reduce them to a less than significant level. Additionally, the General Plan Update EIR documented significant and unavoidable cumulative impacts for agriculture resources, air quality, noise, and transportation.

As discussed in this Tiered ISMND, the Project would result in less than significant impacts related to air quality, noise, and transportation. Therefore, the Project would not contribute to a significant cumulative impact related to these topics identified in the General Plan Update EIR.

The Project was evaluated to determine if the incremental contribution from new impacts would contribute to a cumulative impact as identified in the General Plan Update EIR. For the Project, the only resources identified that would cause a need for a Project-specific mitigation measure, thus needing to be evaluated are Agricultural Resources and Biological Resources.

As discussed in Section 3.2, Agriculture and Forestry Resources, the Project would convert a total of 44.34 acres of Farmland of Statewide Importance and 17.21 acres of Farmland of Local Importance to non-agricultural use. However, the proposed land use is consistent with the City's overall planning vision, as identified in the General Plan Update, which assumes the site would be developed with a mix of residential uses. The General Plan Update and General Plan Update EIR anticipated development of the Project site as part of the overall evaluation of buildout of the City. The General Plan Update EIR also addressed the conversion and loss of agricultural land that would result from buildout of the General Plan Update, providing a discussion of the General Plan policies intended to reduce impacts. The City certified

the General Plan EIR, adopted Statement of Overriding Considerations and Findings of Fact, and adopted the General Plan Update on July 18, 2023. The Project would be required to implement Mitigation Measure AG-1 and pay the applicable mitigation fees per the City's Agricultural Mitigation Fee Program (Chapter 13.42 of the Manteca Municipal Code) to reduce impacts from the conversion of Important Farmland to non-agricultural uses. The Agricultural Mitigation Fee Program authorizes the collection of development impact fees to offset the costs associated with the loss of productive agricultural lands converted for urban uses within the City. The mitigation fee is established on a per-acre basis in Title VI of the City's Development Fee Schedule and is required to be paid prior to the issuance of any building permits. The fees may be used as fair share compensation for farmland conservation easements, or farmland deed restrictions that conserve existing agricultural land. The fees collected by the City under the Agricultural Mitigation Fee Program are distributed to the Central Valley Farmland Trust. The Central Valley Farmland Trust then uses the fees to facilitate the placement of agricultural conservation easements to fulfill farmland mitigation requirements in the Central Valley. As such, the Project would not additively contribute to any other active or reasonably foreseeable projects in the vicinity. The Project-specific mitigation measure would reduce the Project impacts to a less than significant level and not contribute to a cumulative context.

As discussed in Section 4.3, Biological Resources, impacts on nesting birds would be limited to the construction phase which is limited in duration and is geographically isolated to the Project site and adjacent parcels and reduced to a less than significant level with implementation of Mitigation Measure BIO-1. Mitigation Measure BIO-1 involves conducting pre-construction nesting bird surveys to document all nests on and adjacent to the Project site. Protective buffers would be implemented around all documented nests during construction to minimize disturbance to nesting birds to a less than significant level. Therefore, the proposed project would not contribute to a cumulative impact.

Potential impacts associated with the Project would not increase the severity of any of the cumulatively considerable impacts from the levels identified and analyzed in the General Plan Update EIR. The Project would result in a less than significant cumulative impact with implementation of the Project-specific mitigation measures and/or applicable policies and actions identified in the General Plan Update EIR.

Level of Significance Before Mitigation
Potentially Significant Impact.

Mitigation Measures
Mitigation Measures AG-1 and BIO-1 would be required.

Level of Significance After Mitigation
Less Than Significant Impact with Mitigation.

Impact MFS-3	**Does the project have environmental impacts which will cause substantial adverse impacts on human beings, either directly or indirectly?**

Impact Analysis
The Project would not directly or indirectly cause substantial adverse effects on human beings. Air quality, GHG, hazardous materials, and noise would have the only potential effects through which the Project could have a substantial effect on human beings. However, all potential effects of the Project related to air quality, GHG, hazardous materials, and noise are identified as less than significant or less than significant with the implementation of policies and actions from the General Plan Update.

Level of Significance Before Mitigation
Less Than Significant Impact.

Mitigation Measures
No mitigation is necessary.

Level of Significance After Mitigation
Less Than Significant Impact.

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