CITY OF MOORPARK GENERAL PLAN 2050

DRAFT ENVIRONMENTAL IMPACT REPORT

VOLUME I

State Clearinghouse No. 2022050327 | December 2022

MADE BY MOORPARK General Plan **2050**

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DRAFT ENVIRONMENTAL IMPACT REPORT
Volume I

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PLACEWORKS

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December 2022 | Draft Environmental Impact Report
State Clearinghouse No. 2022050327

MOORPARK GENERAL PLAN 2050

for City of Moorpark

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ABBREVIATIONS AND ACRONYMS

AAQS	ambient air quality standards
AB	Assembly Bill
ACM	asbestos-containing materials
ADT	average daily traffic
af	acre-foot
afy	acre-feet per year
APCD	air pollution control district
AQMD	air quality management district
AQMP	air quality management plan
AR5	IPCC's Fifth Assessment Report
BMP	best management practices
BP	before present (years)
C&D	construction and demolition
CAFE	corporate average fuel economy
CAL FIRE	California Department of Forestry and Fire Protection
Cal OES	California Governor's Office of Emergency Services
Cal/OSHA	California Occupational Safety and Health Administration
CalARP	California Accidental Release Prevention Program
CalEPA	California Environmental Protection Agency
CALGreen	California Green Building Standards Code
CalRecycle	California Department of Resources, Recycling, and Recovery
Caltrans	California Department of Transportation
CARB	California Air Resources Board
CBC	California Building Code
CCR	California Code of Regulations
CDFW	California Department of Fish and Wildlife
CEC	California Energy Commission
CEQA	California Environmental Quality Act
CERCLA	Comprehensive Environmental Response, Compensation and Liability Act
CES	CalEnviroScreen
CESA	California Endangered Species Act

Abbreviations and Acronyms

CFGC	California Fish and Game Code
CFR	Code of Federal Regulations
CGP	Construction General Permit
CIP	capital improvements program
CMWD	Calleguas Municipal Water District
CNDDB	California Natural Diversity Database
CNEL	community noise equivalent level
CO	carbon monoxide
CO_2e	carbon dioxide equivalent
CPA	Clean Power Alliance
CRHR	California Register of Historical Resources
CTP	comprehensive transportation plan
CUPA	Certified Unified Program Agency
CURB	city-urban restriction boundary
CWA	Clean Water Act
dB	decibel
dBA	A-weighted decibel
DEIR	draft environmental impact report
DIF	development impact fee
DOC	Department of Conservation (CA)
DOF	Department of Finance (CA)
DOT	Department of Transportation (US)
DPM	diesel particulate matter
DSOD	Division of Safety of Dams
DTSC	Department of Toxic Substances Control
EDD	Employment Development Department (CA)
EO	Executive Order
EOP	emergency operations plan
EPA	United States Environmental Protection Agency
EPCRA	Emergency Planning and Community Right-to-Know Act
FCC	Federal Communications Commission
FCGMA	Fox Canyon Groundwater Management Agency
FEMA	Federal Emergency Management Agency

Abbreviations and Acronyms

FESA	Federal Endangered Species Act
FHSZ	fire hazard severity zone
FHWA	Federal Highway Administration
FRA	Federal Railroad Administration
FTA	Federal Transit Administration
GHG	greenhouse gases
gpcd	gallons per capita per day
GSA	groundwater sustainability agency
GSP	groundwater sustainability plan
GWh	gigawatt hour
GWP	global warming potential
HCD	Housing and Community Development Department (CA)
HCP	habitat conservation plan
Hz	Hertz
IFC	International Fire Code
IPCC	Intergovernmental Panel on Climate Change
Ka	thousand years ago
kW	kilowatt
kWh	kilowatt-hour
L_{dn}	day-night noise level
L_{eq}	equivalent continuous noise level
LBP	lead-based paint
LCFS	low-carbon fuel standard
LEPC	local emergency planning committee
LID	low impact development
LOS	level of service
LPVB	Las Posas Valley Basin
LRA	local responsibility area
LUST	leaking underground storage tank
Ma	million years old
MBTA	Migratory Bird Treaty Act
mgd	million gallons per day
MHMP	multi-jurisdiction hazard mitigation plan

Abbreviations and Acronyms

MMT	million metric tons
MPD	master plan of drainage
MPO	metropolitan planning organization
MS4	municipal separate storm sewer system
MT	metric ton
MUSD	Moorpark Unified School District
MWD	Metropolitan Water District of Southern California
MWRF	Moorpark Water Reclamation Facility
NAHC	Native American Heritage Commission
NCCP	natural communities conservation plan
NO_X	nitrogen oxides
NOP	Notice of Preparation (of an EIR)
NPDES	National Pollution Discharge Elimination System
NRHP	National Register of Historic Places
NVCS	National Vegetation Classification Standard
O_3	ozone
OD	origin-destination
OHWM	ordinary high water mark
P-C	Production-Consumption
PFYC	Potential Fossil Yield Classification
PHMSA	Pipeline and Hazardous Materials Safety Administration (DOT)
PM	particulate matter
POTW	publicly owned treatment works
ppb	parts per billion
ppm	parts per million
PPV	peak particle velocity
PRC	Public Resources Code
PRD	permit registration documents
PRPA	Paleontological Resources Preservation Act of 2002
RCRA	Resource Conservation and Recovery Act
RHNA	regional housing needs assessment
RPS	renewable portfolio standard
RWQCB	Regional Water Quality Control Board

SARA	Superfund Amendments and Reauthorization Act
SB	Senate Bill
SCAG	Southern California Association of Governments
SCCAB	South Central Coast Air Basin
SCCIC	South Central Coastal Information Center
SCE	Southern California Edison
SCRRA	Southern California Regional Rail Authority
SCS	sustainable communities strategy
SERC	State Emergency Response Commission
SGMA	Sustainable Groundwater Management Act
SMARA	Surface Mining and Reclamation Act
SO_X	sulfur oxides
SOAR	Save Open Space and Agricultural Resources
SRA	state responsibility area
SWPPP	Storm Water Pollution Prevention Plan
SWRCB	State Water Resources Control Board
TAC	toxic air contaminants
TAZ	traffic analysis zone
TCR	tribal cultural resource
TGM	Technical Guidance Manual for Stormwater Quality Measures
TMDL	total maximum daily load
TTCP	traditional tribal cultural places
UP	Union Pacific
USACE	United States Army Corps of Engineers
USC	United States Code
USFWS	United States Fish and Wildlife Service
UST	underground storage tank
UWMP	urban water management plan
VCAPCD	Ventura County Air Pollution Control District
VCFD	Ventura County Fire Department
VCRMA	Ventura County Resource Management Agency, Environmental Health Division
VCSO	Ventura County Sherriff's Office
VCTC	Ventura County Transportation Commission

Abbreviations and Acronyms

VCTM	Ventura County Transportation Model
VCWD	Ventura County Water District
VCWPD	Ventura County Watershed Protection District
VMT	vehicle miles traveled
VMT/SP	vehicle miles traveled per service population
VOC	volatile organic compound
WQMP	water quality management plan
WSMP	water system master plan
WUI	wildland-urban interface
ZE/NZE	zero emissions / near-zero emissions
ZEV	zero emissions vehicle
ZNE	zero net energy

1. Executive Summary

1.1 INTRODUCTION

This draft environmental impact report (DEIR) addresses the environmental effects associated with the implementation of the proposed Moorpark General Plan 2050. The California Environmental Quality Act (CEQA) requires that local government agencies consider the environmental consequences before taking action on projects over which they have discretionary approval authority. An environmental impact report (EIR) analyzes potential environmental consequences in order to inform the public and support informed decisions by local and state governmental agency decision makers.

This DEIR has been prepared pursuant to the requirements of CEQA and the City of Moorpark's CEQA procedures. The City of Moorpark, as the lead agency, has reviewed and revised all submitted drafts, technical studies, and reports as necessary to reflect its own independent judgment, including reliance on City technical personnel from other departments and review of all technical subconsultant reports.

Data for this DEIR derive from on-site field observations; discussions with affected agencies; analysis of adopted plans and policies; review of available studies, reports, data, and similar literature; and specialized environmental assessments (air quality, biological resources, cultural resources, energy, greenhouse gas emissions, noise, transportation and traffic, and utilities and service systems).

1.2 ENVIRONMENTAL PROCEDURES

This DEIR has been prepared pursuant to CEQA to assess the environmental effects associated with implementation of the proposed project, as well as anticipated future discretionary actions and approvals. CEQA established six main objectives for an EIR:

1. Disclose to decision makers and the public the significant environmental effects of proposed activities.
2. Identify ways to avoid or reduce environmental damage.
3. Prevent environmental damage by requiring implementation of feasible alternatives or mitigation measures.
4. Disclose to the public reasons for agency approval of projects with significant environmental effects.
5. Foster interagency coordination in the review of projects.
6. Enhance public participation in the planning process.

An EIR is the most comprehensive form of environmental documentation in CEQA and the CEQA Guidelines; it is intended to provide an objective, factually supported analysis and full disclosure of the

environmental consequences of a proposed project with the potential to result in significant, adverse environmental impacts.

An EIR is one of various decision-making tools used by a lead agency to consider the merits and disadvantages of a project that is subject to its discretionary authority. Before approving a proposed project, the lead agency must consider the information in the EIR; determine whether the EIR was prepared in accordance with CEQA and the CEQA Guidelines; determine that it reflects the independent judgment of the lead agency; adopt findings concerning the project's significant environmental impacts and alternatives; and adopt a statement of overriding considerations if significant impacts cannot be avoided.

1.2.1 Type and Purpose of This DEIR

This DEIR fulfills the requirements for a Program EIR. Although the legally required contents of a Program EIR are the same as for a Project EIR, Program EIRs are typically more conceptual than Project EIRs, with a more general discussion of impacts, alternatives, and mitigation measures. According to Section 15168 of the CEQA Guidelines, a Program EIR may be prepared on a series of actions that can be characterized as one large project. Use of a Program EIR gives the lead agency an opportunity to consider broad policy alternatives and program-wide mitigation measures, as well as greater flexibility to address project-specific and cumulative environmental impacts on a comprehensive scale.

Agencies prepare Program EIRs for programs or a series of related actions that are linked geographically; logical parts of a chain of contemplated events, rules, regulations, or plans that govern the conduct of a continuing program; or individual activities carried out under the same authority and having generally similar environmental effects that can be mitigated in similar ways.

Once a Program EIR has been prepared, subsequent activities within the program must be evaluated to determine whether an additional CEQA document is necessary. However, if the Program EIR addresses the program's effects as specifically and comprehensively as possible, many subsequent activities may be within the Program EIR's scope, and additional environmental documents may not be required (Guidelines Section 15168[c]). When a lead agency relies on a Program EIR for a subsequent activity, it must incorporate feasible mitigation measures and alternatives from the Program EIR into the subsequent activities (Guidelines Section 15168[c][3]). If a subsequent activity would have effects outside the scope of the Program EIR, the lead agency must prepare a new Initial Study leading to a Negative Declaration, Mitigated Negative Declaration, or an EIR. Even in this case, the Program EIR still serves a valuable purpose as the first-tier environmental analysis. The CEQA Guidelines encourage the use of Program EIRs, citing five advantages:

- Provide a more exhaustive consideration of impacts and alternatives than would be practical in an individual EIR.
- Focus on cumulative impacts that might be slighted in a case-by-case analysis.
- Avoid continual reconsideration of recurring policy issues.

- Consider broad policy alternatives and programmatic mitigation measures at an early stage when the agency has greater flexibility to deal with them.
- Reduce paperwork by encouraging the reuse of data (through tiering). (Guidelines Section 15168[h])

1.2.2 EIR Format

Chapter 1. Executive Summary: Summarizes the background and description of the proposed project, the format of this EIR, project alternatives, any critical issues remaining to be resolved, and the potential environmental impacts and mitigation measures identified for the project.

Chapter 2. Introduction: Describes the purpose of this EIR, the Notice of Preparation (NOP), Scoping Meeting, the use of incorporation by reference, and Final EIR certification.

Chapter 3. Project Description: A detailed description of the project, including its objectives, its area and location, approvals anticipated to be required as part of the project, necessary environmental clearances, and the intended uses of this EIR.

Chapter 4. Environmental Setting: A description of the physical environmental conditions in the vicinity of the project as they existed at the time the notice of preparation was published, from local and regional perspectives. These provide the baseline physical conditions from which the lead agency determines the significance of the project's environmental impacts.

Chapter 5. Environmental Analysis: Each environmental topic is analyzed in a separate section that discusses: the thresholds used to determine if a significant impact would occur; the methodology to identify and evaluate the potential impacts of the project; the existing environmental setting; the potential adverse and beneficial effects of the project; the level of impact significance before mitigation; the mitigation measures for the proposed project; and the level of significance after mitigation is incorporated.

Chapter 6. Significant Unavoidable Adverse Impacts: Describes the significant unavoidable adverse impacts of the proposed project.

Chapter 7. Alternatives to the Proposed Project: Describes the alternatives and compares their impacts to the impacts of the proposed project. Alternatives include the No Project Alternative and a Reduced Intensity Alternative.

Chapter 8. Impacts Found Not to Be Significant: Briefly describes the potential impacts of the project that were determined not to be significant by the Initial Study and were therefore not discussed in detail in this EIR.

Chapter 9. Significant Irreversible Changes Due to the Proposed Project: Describes the significant irreversible environmental changes associated with the project.

Chapter 10. Growth-Inducing Impacts of the Project: Describes the ways in which the proposed project would cause increases in employment or population that could result in new physical or environmental impacts.

Chapter 11. Organizations and Persons Consulted: Lists the people and organizations that were contacted during the preparation of this EIR.

Chapter 12. Qualifications of Persons Preparing EIR: Lists the people who prepared this EIR for the proposed project.

Chapter 13. Bibliography: The technical reports and other sources used to prepare this EIR.

Appendix: The appendix for this document (in PDF format) comprises these supporting documents:

- Appendix A: Notice of Preparation and Public Comment Letters
- Appendix B: Buildout Methodology Memorandum
- Appendix C: Moorpark General Plan 2050 Policies
- Appendix D: Air Quality and Greenhouse Gas Modeling
- Appendix E: Biological Resources Report
- Appendix F1: Cultural Resources Report
- Appendix F2: Cultural Resources Sensitivity Model
- Appendix G: Paleontological Resources Report
- Appendix H: Infrastructure Report
- Appendix I: Noise Monitoring and Modeling
- Appendix J: Public Service Responses
- Appendix K: VMT Memorandum
- Appendix L: Tribal Consultation Responses

1.3 PROJECT LOCATION

The City of Moorpark is in eastern Ventura County in the Transverse Ranges of Southern California, as shown on Figure ES-1*, Regional Context*, and Figure ES-2, *Citywide Aerial*. It is generally bounded by the city of Simi Valley to the east, the Tierra Rejada Valley and city of Thousand Oaks to the south, and unincorporated Ventura County to the west and north.

Figure ES-1
Regional Context

City of Moorpark
Surrounding Cities
County Boundary

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0 1.5 3 6 Miles

Source: The City of Moorpark 2022 Date: 10/27/2022

1. Executive Summary

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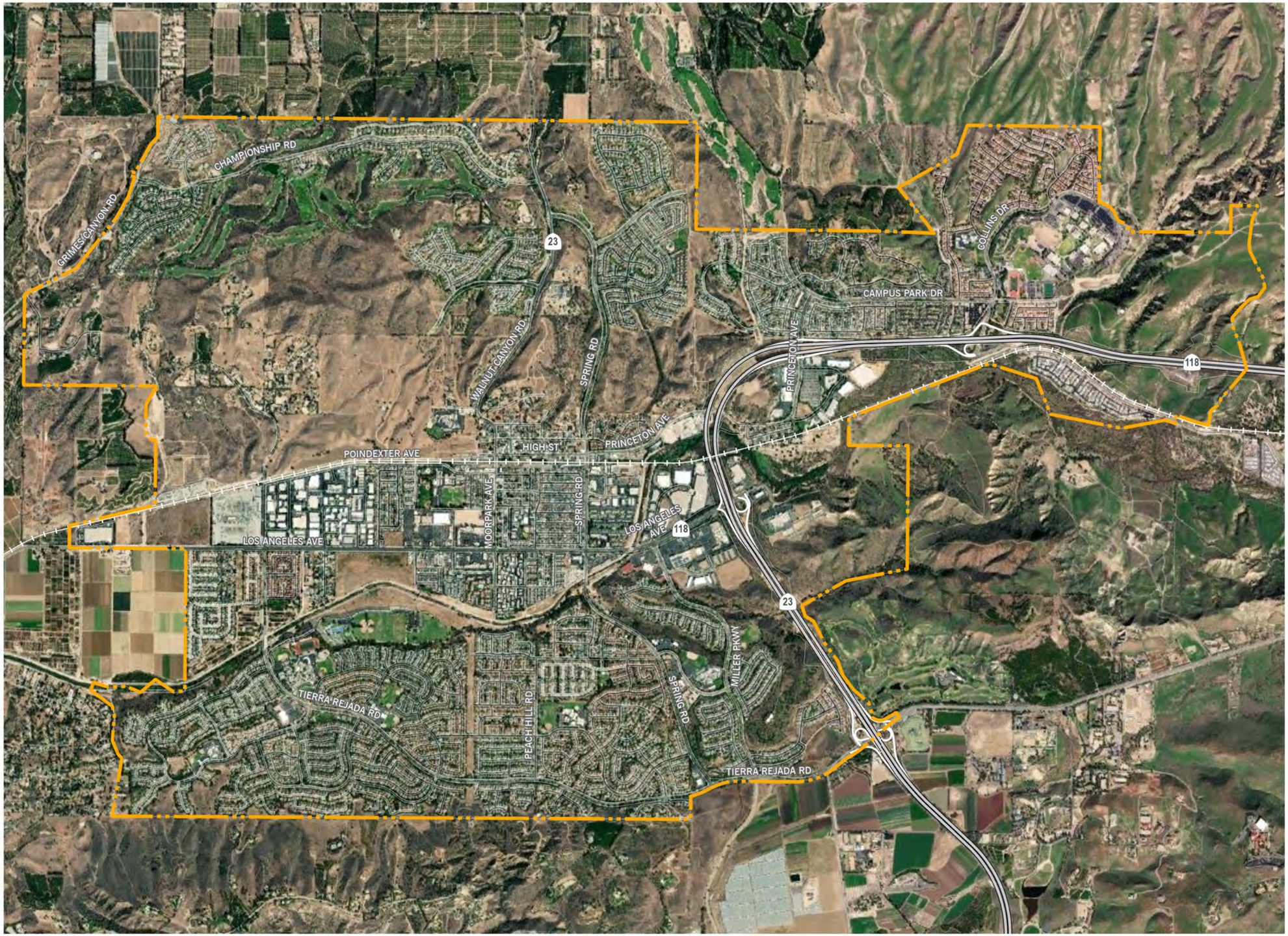
Figure ES-2

Citywide Aerial



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Source: The City of Moorpark 2022 Date: 10/27/2022

1. Executive Summary

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Lands west of the city are largely agricultural and protected from development by the Save Open Space and Agricultural Resources voter-approved initiatives, requiring the public's vote before any agricultural or open space lands are rezoned for development. The city's northerly boundary is largely mountainous. Its sphere of influence, as designated by the Ventura County Local Area Formation Commission, is coterminous with its jurisdictional boundaries. Regional access to Moorpark is provided by the Ronald Reagan Freeway (SR-118) and State Route 23 (SR-23), and rail service to the Los Angeles basin and destinations to the north is provided by MetroLink and Amtrak from the station on High Street.

Figure ES-3, *Existing Land Use*, shows the distribution of existing land uses in Moorpark. Figure ES-4, *Current Land Use Plan*, shows the existing land use designations in Moorpark.

1.4 PROJECT SUMMARY

The proposed project is an update of the City of Moorpark's General Plan. The general plan is a State-required legal document that provides guidance to decision-makers regarding the allocation of resources and determining the future physical form and character of development in the city. It is the official statement regarding the extent and types of development needed to achieve the community's physical, economic, social, and environmental goals. Although the General Plan is composed of individual sections, or "elements" that individually address a specific area of concern, the General Plan embodies a comprehensive and integrated planning approach for the jurisdiction.

Under State law, each city and county general plan has these eight mandated elements: land use, circulation, housing, conservation, open space, noise and safety, and environmental justice. These elements can be formatted in any manner within a general plan and do not need to be "stand-alone" chapters. Government Code Section 65303 also permits local jurisdictions to formulate other elements, which, in the "judgment of the planning agency," relate to the physical development of the city. These "permissive" elements are as legally binding as a mandatory element, once adopted. The City of Moorpark has directed the inclusion of an additional permissive elements in its General Plan, economic development.

1.4.1 Proposed General Plan

The proposed General Plan is a comprehensive update of the current General Plan. The update includes the following elements that address all the required topics in state law:

- The **Land Use Element** establishes how land is developed, used, and arranged to ensure compatibility and add value to the community in terms of function, design, and fiscal return.
- The **Circulation Element** coordinates the circulation system with future land use patterns and buildout to satisfy local and subregional mobility needs, as well as access and connectivity between various neighborhoods and districts. This element also defines goals and policies for the provision of public infrastructure to support the uses accommodated by the Land Use Element.

- The **Housing Element** ensures greater production, preservation, and improvement of housing in the community in the context of existing and future housing needs, constraints to the production of housing, and available land and financial resources.
- The **Economic Development Element** articulates the City's approach to developing and maintaining the local economy, retaining, and attracting further investments, and connecting economic development with the City's long-term fiscal health.
- The **Open Space, Parks, and Recreation Element** establishes direction for the City's park system and recreation programs, emphasizing the vital role parks and recreation programs play in economic development, land use, housing, community health, infrastructure, and transportation goals.
- The **Conservation Element** addresses how resources are managed comprehensively using systems that are environmentally and economically sustainable and meet growth demand in Moorpark.
- The **Safety Element** addresses how the City protects life, property, and commerce from impacts associated with human-made and natural hazards, disasters, and other threats to public safety. It also identifies ways the City can establish strategies to adapt to increased hazard risks and strategies to become more resilient.
- The **Noise Element** provides a basis for comprehensive local programs to control and abate environmental noise and to protect residents from excessive exposure.

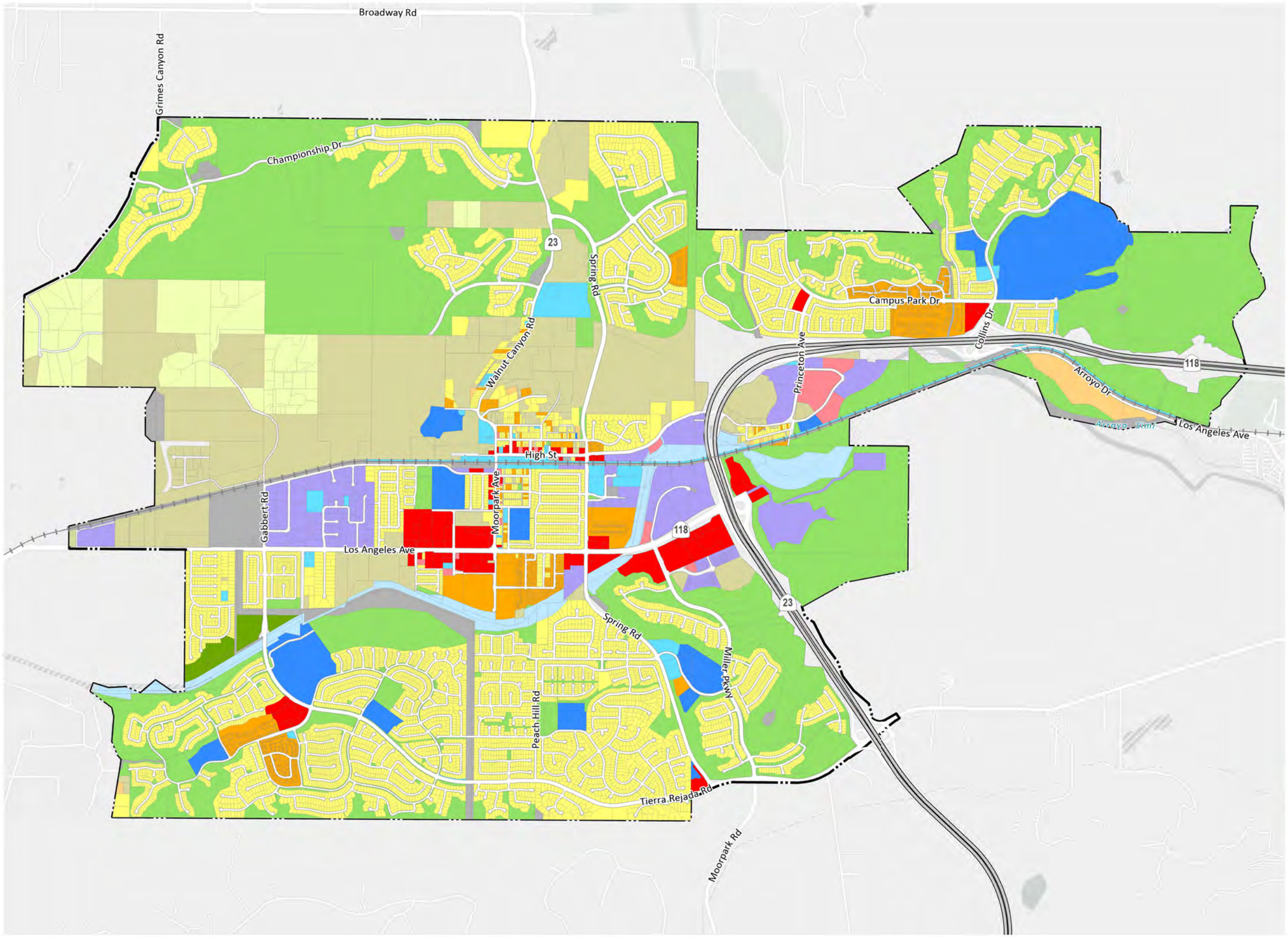
In addition to these elements, the General Plan will also include an **Implementation Plan** that identifies responsible parties and the actions needed to carry out General Plan policies.

1.4.1.1 STATEMENT OF OBJECTIVES

The City of Moorpark's 2050 General Plan Update (proposed project) is a comprehensive effort undertaken by the City that will update the existing General Plan for the next 30 years through 2050. The updated General Plan will bring all elements (chapters) into compliance with state housing mandates; conform with new state laws related to community health, environmental justice, climate adaption, resiliency, and mobility; and bring long-term growth and fiscal projections into alignment with current economic conditions. Moorpark's vision statement guides land use decisions in the city:

> Moorpark in 2050 is a virtually and physically connected community that provides a sustainable, diverse, inclusive, equitable and safe place to live, work, and play for all generations. Moorpark supports and values local businesses, arts and education, innovation, healthy living, and maintains its family-oriented small-town feel. We are stewards of the environment and honor our agricultural and cultural heritage. We balance these values to maintain a high quality of life for our residents.

Figure ES-3
Existing Land Use



City Boundary
Railroad

Existing Land Use
- Agriculture
- Rural Residential
- Single Family Residential
- Multi-family Residential
- Mobile Home
- Commercial Services
- General Office
- Industrial
- Education
- Public Facilities
- Transportation, Communication, Utilities
- Open Space and Recreation
- Vacant
- Water/Floodway
- Right of Way

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Source: The City of Moorpark 2022 Date: 10/27/2022

1. Executive Summary

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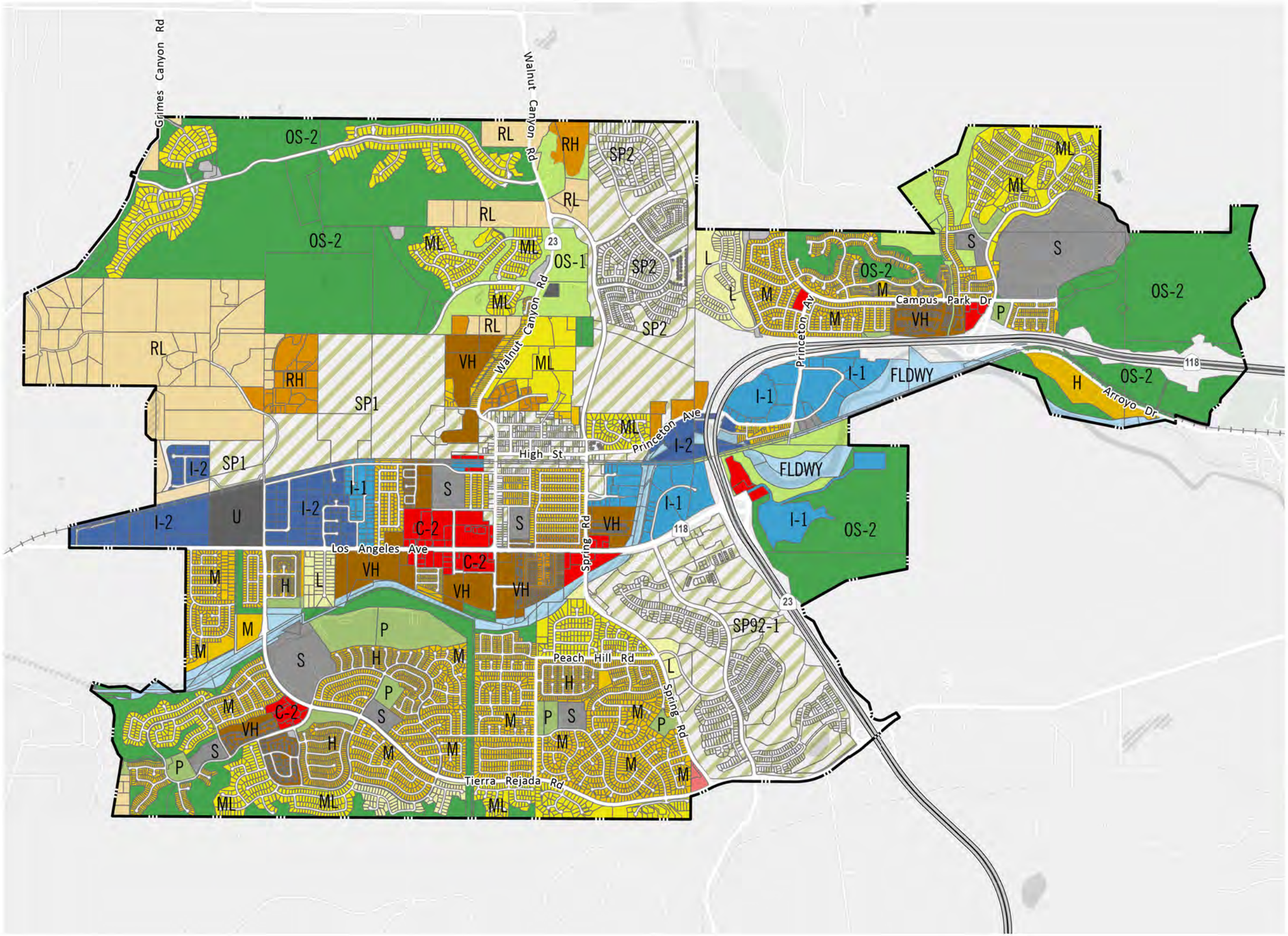
Figure ES-4
Current General Plan



City Boundary
Railroad

Current General Plan Land Use

- AG-1, Agriculture
- RL, Rural Low Density Residential (1 du/5 ac)
- RH, Rural High Density Residential (1 du/1 ac)
- L, Low Density Residential
- ML, Medium Low Density Residential
- M, Medium Density Residential
- H, High Density Residential
- VH, Very High Density Residential
- OS-1, Open Space 1 (1 du/10-40 ac)
- OS-2, Open Space 2 (1 du/40 ac)
- P, Park
- S, School
- PUB, Public/Institutional
- U, Utilities
- FLDWY, Floodway
- C-1, Neighborhood Commercial
- C-2, General Commercial
- I-1, Light Industrial
- I-2, Medium Industrial
- SP1, SP2, SP9, or SP92-1
- SP-D, Downtown Specific Plan
- ROW, Freeway or Right of Way

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1. Executive Summary

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Objectives for the Moorpark General Plan 2050 will aid decisionmakers in their review of the project and associated environmental impacts.

1. Sustainable growth through well-planned development that provides for the needs of Moorpark's residents and businesses, makes efficient use of land and infrastructure, protects important environmental resources, promotes the health of the community, and maintains the unique character distinguishing the city as a special place in the region.

2. A city of distinct, compact, and walkable centers and corridors, surrounded by diverse and complete neighborhoods, and connected to a unifying network of greenways and open spaces.

3. Fair and equitable access for all residents to employment, housing, parks, education, recreation, transportation, retail, and public services, including participation in governmental decision-making.

4. Well-designed housing that is diverse in product type, occupancy, location, affordability, and tenure and that meets the existing and future needs of residents.

5. Vital, active, prosperous, and well-designed commercial centers and corridors that offer a diversity of goods, services, and entertainment and contribute a positive experience for Moorpark's residents and visitors.

6. A diversity of well-designed districts and corridors containing an integrated mix of commercial, office, and/or housing that enable Moorpark's residents to live close to businesses and employment, reduce automobile use, and actively engage and enhance pedestrian activity.

7. A transportation system supporting uses accommodated by the Land Use Plan and providing for the safe and efficient movement of people of all ages and abilities, goods, and services into, out of, and through the City of Moorpark.

8. A citywide system of safe, efficient, and attractive bicycle, pedestrian and multi-use trail routes for commuter, school, and recreational use.

9. Transportation systems and utility infrastructure that supports Moorpark's neighborhoods and business districts, are efficient, and employ best practices for environmental sustainability and carbon reduction.

10. A self-sustaining, innovative, and resilient local economy that provides goods and services desired by local residents, promotes growth in living-wage jobs and access to lifelong learning, attracts regional consumer spending, and contributes to Moorpark's premier quality of life.

11. Protection of scenic topographic features and elements that contribute to Moorpark's unique aesthetic and visual qualities and promote the quality of life that Moorpark citizens pursue. Sensitive natural and biological resources are protected from detrimental impacts of new development and enhanced and restored where possible.

12. Moorpark's unique historical, cultural, archaeological, and paleontological resources are preserved and protected.

13. Easy access to parks and recreational facilities, healthy foods, health facilities, and arts and cultural events enriches Moorpark's physical and mental health.

14. A City that improves the ability of individuals, communities, economic systems, and the natural and built environments to withstand, recover from, and adapt to changes from natural hazards, human-made disasters, climate change, and economic shifts.

1.4.1.2 COMPARISON OF EXISTING LAND USES AND LAND USES AT BUILDOUT

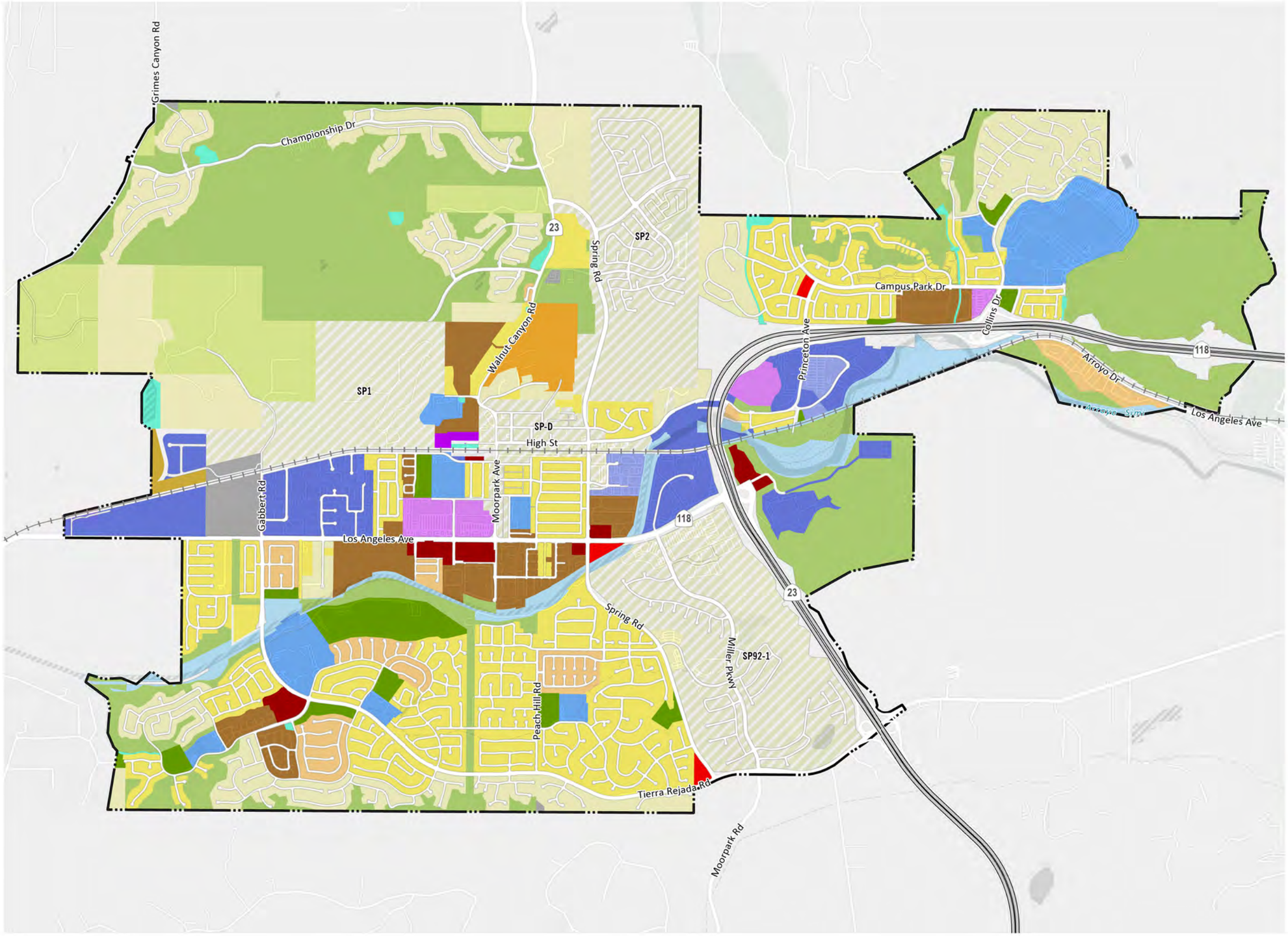
Figure ES-5, *Proposed Land Use Plan,* shows the proposed General Plan Land Use Map for the city. As detailed in Table ES-1, *Comparison of Existing Conditions to Buildout of the Moorpark General Plan 2050*, the General Plan update would result in a potential buildout total of 17,025 housing units, 53,781 residents, 13,567,083 nonresidential square feet, and 20,249 jobs in the city. Compared to existing conditions, the proposed project would result in an increase of 5,488 units, 17,336 residents, 4,783,912 nonresidential square feet, and 7,334 jobs.

Table ES-1 Comparison of Existing Conditions to Buildout of the Moorpark General Plan 2050

Scenario	Acres	Residential Units	Population	Nonresidential Square Feet	Employment
Existing Conditions	7,992	11,537	36,445	8,783,171	12,915
Proposed Land Use Plan	7,992	17,025	53,781	13,567,083	20,249
Net Difference (Proposed General Plan – Existing)	**0**	**+5,488**	**+17,336**	**+4,783,912**	**+7,334**

Buildout projections shown in Table ES-1 are used throughout this DEIR to estimate the magnitude of development that could likely occur in Moorpark upon implementation of the General Plan update. Population projections are a liberal estimate based on full buildout of the 2050 Moorpark General Plan to support the CEQA analysis. However, the current general plan failed to reach its population projection during the plan period because ultimate buildout and development is largely dependent upon social and economic forces outside of the scope and control of the general plan. The table also shows the difference between potential growth and the amount of development as the existing conditions. Land use calculations are used to estimate the number of dwelling units, residents, square feet of nonresidential uses, and employees that could be generated by proposed land uses. These projections are then used to provide a liberal estimate how much noise, traffic, and other impacts could occur due to these changes.

Figure ES-5
Proposed Land Use Plan



City Boundary
Railroad

Proposed General Plan
- AG - Agriculture
- R - Rural
- NVL Neighborhood Very Low
- NL - Neighborhood Low
- NM - Neighborhood Medium
- NMX - Neighborhood Mixed Density
- NH - Neighborhood High
- MUD - Mixed Use District
- MUM - Mixed Use Medium
- NC - Neighborhood Commercial
- C-A - Commercial Auto
- IF - Industrial Flex
- IP - Industrial Park
- PUB - Public
- S - School
- NCP - Neighborhood/Community Park
- OS - Open Space
- FLDWY - Floodway
- U - Utility
- SP-D - Downtown SP
- SP1 - Hitch Ranch SP
- SP2 - Moorpark Highlands SP
- SP92-1 - Carlsberg SP
- ROW - Right of Way

MADE BY MOORPARK General Plan 2050

Draft Environmental Impact Report

0 1,000 2,000 4,000 FT

Source: PlaceWorks, 2022

Date: 11/1/2022

1. Executive Summary

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1.5 SUMMARY OF PROJECT ALTERNATIVES

The CEQA Guidelines (Section 15126.6[a]) state that an EIR must address "a range of reasonable alternatives to the project, or to the location of the project, which could feasibly attain the basic objectives of the project, but would avoid or substantially lessen any of the significant effects of the project and evaluate the comparative merits of the alternatives." The alternatives in this DEIR were based, in part, on their potential ability to reduce or eliminate the impacts determined to be significant and unavoidable for implementation of the proposed project. Project alternatives are assessed in further detail in Chapter 7, *Alternatives to the Proposed Project*.

1.5.1 Alternatives Selected for Further Analysis

Based on the criteria listed above, the following three alternatives have been determined to represent a reasonable range of alternatives that have the potential to feasibly attain most of the basic objectives of the Moorpark General Plan 2050 but may avoid or substantially lessen any of the new significant effects of the proposed project.

- No Project/Current General Plan Alternative
- Increased Density Land Use Alternative
- Reduced Industrial Land Use Alternative

An EIR must identify an "environmentally superior" alternative, and where the No Project Alternative is identified as environmentally superior, the EIR is required to identify an alternative from among the others evaluated as environmentally superior. However, only impacts where the proposed project would result in significant impacts are used in making the final determination of whether an alternative is environmentally superior or inferior to the proposed project. Each alternative's environmental impacts are compared to the proposed project and determined to be environmentally superior, neutral, or inferior. Section 7.7 identifies the Environmentally Superior Alternative. The proposed project is analyzed in detail in Chapter 5 of this DEIR.

1.5.1.1 NO-PROJECT/CURRENT GENERAL PLAN ALTERNATIVE

In the No Project/Current General Plan Alternative, the Moorpark General Plan 2050 would not be implemented by the City. The current General Plan would remain in effect. Buildout statistics for Moorpark General Plan 2050 and the current General Plan are compared in Table 7-1. In addition, this alternative would not include the updates to the Land Use Element; Circulation Element; Housing Element; Economic Development Element; Open Space, Parks, and Recreation Element; Conservation Element; Safety Element; Noise Element; or Implementation Plan.

Impacts of the No Project/Current General Plan alternative would be similar for aesthetics, agriculture and forestry resources, air quality, biological resources, cultural resources, energy, geology and soils, GHG emissions, hazards and hazardous materials, hydrology and water quality, mineral resources, noise, population and housing, transportation, tribal cultural resources, and wildfire. Impacts would be greater for land use and planning. Impacts would be reduced for public services, recreation, and utilities and service systems.

The No Project/Current General Plan Alternative would meet all of the project objectives; however, this alternative would not implement the proposed Moorpark General Plan 2050 policies, which are designed to further enhance the project objectives, compared to the current General Plan.

1.5.1.2 INCREASED DENSITY ALTERNATIVE

The increased density land use alternative would result in an increase in 292 multifamily residential units and a decrease in 292 single-family residential units. The multifamily residential land uses would increase near the city center in more developed areas and would be outside the very high fire hazard severity zones. The reduction in single-family residential land use would occur in the outer portions of the city near open space–designated areas.

Impacts of the Increased Density Land Use Alternative would be similar for aesthetics, agriculture and forestry resources, cultural resources, geology and soils, hazards and hazardous materials, land use and planning, mineral resources, noise, population and housing, public services, recreation, and tribal cultural resources. Impacts would be reduced for air quality, biological resources, energy, GHG emissions, hydrology and water quality, utilities and service systems, and wildfire. No impact areas would result in greater impacts compared to the proposed project. The Increased Density Land Use Alternative would meet the project objectives but to a lesser extent than the proposed project.

1.5.1.3 REDUCED INDUSTRIAL LAND USE ALTERNATIVE

The Moorpark General Plan 2050 designates approximately 177.1 acres for industrial uses (Industrial Flex [IF] and Industrial Park [IP]) in the western portion of the city, west of the Southern California Edison substation that is currently undeveloped. Under this alterative, 70.1 undeveloped acres of this area would instead be designated for Neighborhood Medium Residential (NM) to allow for multifamily residential development. This alternative would result in a reduction of approximately 3 million square feet of industrial, with a corresponding decrease of 4,412 employees[1] and an increase of up to 1,697 additional dwelling units.[2]

Impacts of the Reduced Industrial Land Use Alternative would be similar for aesthetics, agriculture and forestry resources, biological resources, cultural resources, geology and soils, mineral resources, tribal cultural resources, and wildfire. Impacts would be reduced for air quality, GHG emissions, hazards and hazardous materials, hydrology and water quality, and noise. Impacts would be greater for land use and planning, population and housing, public services, recreation, transportation, and utilities and system services. The Reduced Industrial Land Use Alternative would meet the project objectives but to a lesser extent than the proposed project.

[1] Using the factor of 698 square feet/ employee based on the calculations used within the General Plan Buildout Memorandum (see Appendix B of the DEIR).
[2] Using the factor of 24 du/ acre, which is based on the du/acre for Neighborhood Medium.

1.6 ISSUES TO BE RESOLVED

Section 15123(b)(3) of the CEQA Guidelines requires that an EIR contain issues to be resolved, including the choice among alternatives and whether or how to mitigate significant impacts. With regard to the proposed project, the major issues to be resolved include decisions by the lead agency as to:

1. Whether this DEIR adequately describes the environmental impacts of the project.
2. Whether the benefits of the project override the environmental impacts that cannot be feasibly avoided or mitigated to a level of insignificance.
3. Whether the proposed land use changes are compatible with the character of the existing area.
4. Whether the identified goals, policies, or mitigation measures should be adopted or modified.
5. Whether there are other mitigation measures that should be applied to the project besides the Mitigation Measures identified in the DEIR.
6. Whether there are any alternatives to the project that would substantially lessen any of the significant impacts of the proposed project and achieve most of the basic project objectives.

1.7 AREAS OF CONTROVERSY

In accordance with Section 15123(b)(2) of the CEQA Guidelines, the EIR summary must identify areas of controversy known to the lead agency, including issues raised by agencies and the public. The City of Moorpark has no knowledge of expressed opposition to the proposed project. Prior to preparation of the DEIR, a public scoping meeting was held on May 31, 2022, to determine the concerns of responsible and trustee agencies and the community regarding the proposed project. The scoping meeting was held at the City of Moorpark and identified concerns related to traffic congestion and safety, water supply, and wildfire hazards. In addition, Notice of Preparation (NOP) comment letters received during the review period are summarized in Chapter 2, *Introduction* (see Table 2-1, *NOP Comment Summary*).

1.8 SUMMARY OF ENVIRONMENTAL IMPACTS, MITIGATION MEASURES, AND LEVELS OF SIGNIFICANCE AFTER MITIGATION

Table ES-2 summarizes the conclusions of the environmental analysis contained in this DEIR. Impacts are identified as significant or less than significant, and mitigation measures are identified for all significant impacts. The level of significance after imposing mitigation measures is also presented.

1. Executive Summary

Although the criteria for determining significance are different for each topic area, the environmental analysis applies a uniform classification of the impacts based on definitions consistent with CEQA and the CEQA Guidelines.

- **No impact.** The project would not change the environment.
- **Less than significant.** The project would not cause any substantial, adverse change in the environment.
- **Potentially significant**. The project's impacts on the environment are potentially significant in the absence of mitigation. Once mitigation measures have been incorporated, if available, the DEIR makes one of two significance determination under the "level of significance after mitigation":
    - **Less than significant with mitigation incorporated.** The EIR includes mitigation measures that avoid substantial adverse impacts on the environment.
    - **Significant and unavoidable.** The project would cause a substantial adverse effect on the environment, and no additional, feasible mitigation measures are available to reduce the impact to a less than significant level.

Table ES-2 Summary of Environmental Impacts, Mitigation Measures and Levels of Significance After Mitigation

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
5.1 AESTHETICS			
Impact 5.1-1: Development in accordance with the Moorpark General Plan 2050 would not substantially alter or damage scenic vistas or resources or degrade views along a state scenic highway.	Less than significant	No mitigation measures are warranted.	Less than significant
Impact 5.1-2: Buildout in accordance with the proposed Land Use Plan would alter the existing visual appearance of the city, but would not substantially degrade its existing visual character or quality.	Less than significant	No mitigation measures are warranted.	Less than significant
Impact 5.1-3: Future development in accordance with the Moorpark General Plan 2050 would generate additional light and glare in the city that would impact surrounding existing land uses; however, light and glare would be minimized through adherence to the City's lighting standards.	Less than significant	No mitigation measures are warranted.	Less than significant
5.2 AGRICULTURE AND FORESTRY RESOURCES			
Impact 5.2-1: Implementation of the Moorpark General Plan would convert Unique Farmland and Farmland of Local Importance to nonagricultural use.	Potentially significant	No feasible mitigation measures are available.	Significant and Unavoidable
Impact 5.2-2: The Moorpark General Plan 2050 would not conflict with existing zoning for agricultural use or a Williamson Act contract.	Less than significant	No mitigation measures are warranted.	Less than significant
Impact 5.2-3: The Moorpark General Plan 2050 would not conflict with existing zoning for forest land, timberland, or timberland zoned Timberland Production, or result in the loss of	Less than significant	No mitigation measures are warranted.	Less than significant

1. Executive Summary

Table ES-2 Summary of Environmental Impacts, Mitigation Measures and Levels of Significance After Mitigation

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
forest land or conversion of forest land to nonforest use.			
5.3 AIR QUALITY			
Impact 5.3-1: Buildout of the Moorpark General Plan 2050, and associated emissions, could exceed the assumptions of the Ventura County AQMP.	Potentially significant	Implementation of Mitigation Measures identified for Impact 5.3-2 and Impact 5.3-3. No additional mitigation measure are feasible.	Significant and Unavoidable

Impact 5.3-2: Construction activities associated with the proposed project could generate short-term emissions in exceedance of Ventura County APCD's threshold criteria.	Potentially significant	AQ 1 **Construction Phase Air Quality Technical Analysis.** Prior to discretionary approval by the City of Moorpark for development projects subject to review under the California Environmental Quality Act (CEQA) (i.e., nonexempt projects), project applicants shall prepare and submit a technical assessment evaluating potential project construction-related air quality impacts to the City of Moorpark Community Development Department for review and approval. The evaluation shall be prepared in conformance with Ventura County Air Pollution Control District (APCD) methodology for assessing air quality impacts. If construction-related criteria air pollutants are determined to have the potential to exceed the Ventura County APCD–adopted thresholds of significance, the City of Moorpark shall require feasible mitigation measures to reduce air quality emissions. Potential measures shall be incorporated as conditions of approval for a project and may include:
		• Require fugitive dust control measures that exceed Ventura County APCD's Regulation IV, Rule 55, Fugitive Dust, such as:
		  ○ Requiring use of nontoxic soil stabilizers to reduce wind erosion.
		  ○ Applying water every four hours to active soil disturbing activities.
		  ○ Tarping and/or maintaining a minimum of 24 inches of freeboard on trucks hauling dirt, sand, soil, or other loose materials.
		• Use construction equipment rated by the United States Environmental Protection Agency as having exhaust emission limits of Tier 4 interim or higher.
		• Ensure construction equipment is properly serviced and maintained to the manufacturers' standards.
		• Limit nonessential idling of construction equipment to no more than five consecutive minutes.
			Significant and Unavoidable

Table ES-2 Summary of Environmental Impacts, Mitigation Measures and Levels of Significance After Mitigation

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
		• Use Super-Compliant VOC paints for coating of architectural surfaces whenever possible. These identified measures shall be incorporated into all appropriate construction documents (e.g., construction management plans) submitted to the City and shall be verified by the City's Community Development Department.	
Impact 5.3-3: Implementation of the proposed project could additional, long-term emissions in exceedance of Ventura County APCD's threshold criteria and cumulatively contribute to the SCCAB's nonattainment designations.	Potentially significant	AQ 2 **Long-Term Air Quality Technical Analysis** Prior to discretionary approval by the City of Moorpark for development projects subject to review under the California Environmental Quality Act (CEQA) (i.e., nonexempt projects), project applicants shall prepare and submit a technical assessment evaluating potential project operation-related air quality impacts to the City of Moorpark Community Development Department for review and approval. The evaluation shall be prepared in conformance with Ventura County Air Pollution Control District (APCD) methodology in assessing air quality impacts. If operation-related air pollutants are determined to have the potential to exceed the Ventura County APCD–adopted thresholds of significance, the City of Moorpark shall require that applicants for new development projects incorporate mitigation measures to reduce air pollutant emissions during operational activities. The identified measures shall be included as conditions of approval. Possible mitigation measures to reduce long-term emissions could include but are not limited to: • For site-specific development that requires refrigerated vehicles, the construction documents shall demonstrate an adequate number of electrical service connections at loading docks to plug in the anticipated number of refrigerated trailers and reduce idling time and emissions. • Applicants for manufacturing and light industrial uses shall consider energy storage and combined heat and power in appropriate applications to optimize renewable energy generation systems and avoid peak energy use. • Site-specific developments with truck delivery and loading areas and truck parking spaces shall include signage as a reminder to limit idling of vehicles while parked for loading/unloading in accordance with California Air Resources Board Rule 2845 (13 CCR Chapter 10 sec. 2485).	Significant and Unavoidable

1. Executive Summary

Table ES-2 Summary of Environmental Impacts, Mitigation Measures and Levels of Significance After Mitigation

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures		Level of Significance After Mitigation
			• Provide changing/shower facilities as specified in the Nonresidential Voluntary Measures of CALGreen. • Provide bicycle parking facilities per the Nonresidential Voluntary Measures and Residential Voluntary Measures of CALGreen. • Provide preferential parking spaces for low-emitting, fuel-efficient, and carpool/van vehicles per the Nonresidential Voluntary Measures of CALGreen. • Provide facilities to support electric charging stations per the Nonresidential Voluntary Measures and Residential Voluntary Measures of CALGreen. • Applicant-provided appliances shall be Energy Star–certified appliances or appliances of equivalent energy efficiency (e.g., dishwashers, refrigerators, clothes washers, and dryers). Installation of Energy Star–certified or equivalent appliances shall be verified by the City during plan check.	
Impact 5.3-4: The proposed project could expose sensitive receptors to substantial toxic air contaminant concentrations.	Potentially significant	AQ-3	**Industrial and Warehouse Development Health Risk Assessments**. Prior to discretionary approval by the City of Moorpark, project applicants for new industrial or warehousing development projects that 1) have the potential to generate 100 or more diesel truck trips per day or have 40 or more trucks with operating diesel-powered transport refrigeration units, and 2) are within 1,000 feet of a sensitive land use (e.g., residential, schools, hospitals, nursing homes), as measured from the property line of the project to the property line of the nearest sensitive use, shall submit a health risk assessment (HRA) to the City of Moorpark Community Development Department for review and approval. The HRA shall be prepared in accordance with policies and procedures of the state Office of Environmental Health Hazard Assessment and the Ventura County Air Pollution Control District (APCD). If the HRA shows that the incremental cancer risk and/or noncancer hazard index exceeds the respective threshold, as established by the Ventura County APCD at the time a project is considered, the project applicant will be required to identify best available control technologies for toxics (T BACTs) and appropriate enforcement mechanisms, and demonstrate that they are capable of reducing potential cancer and noncancer risks to an acceptable level. T-BACTs may include but are not limited to restricting idling on-site or electrifying warehousing docks to reduce diesel particulate matter, or requiring	Significant and Unavoidable

Table ES-2 Summary of Environmental Impacts, Mitigation Measures and Levels of Significance After Mitigation

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
		use of newer equipment and/or vehicles. T-BACTs identified in the HRA shall be identified as mitigation measures in the environmental document and/or incorporated into the site plan.	
Impact 5.3-5: The proposed project would not result in other emissions (such as those leading to odors) that would adversely affect a substantial number of people.	Less than significant	No mitigation measures are warranted.	Less than significant
5.4 BIOLOGICAL RESOURCES			
Impact 5.4-1: Buildout of the Moorpark General Plan 2050 could impact species plant and animal species known to occur in the city.	Potentially significant	BIO-1a **Biological Resources Assessment**. Applicants for future development projects with suitable natural habitat (except for infill redevelopment projects, subject to the discretion of the Community Development Director), shall conduct a biological resources assessment of the proposed project footprint (including proposed access roads, proposed staging and laydown areas, and a suitable buffer surrounding the project footprint). The biological resources assessment shall be conducted by a qualified biologist and summarized in a biological resources letter report or biological resources technical report that will be submitted to the Moorpark Community Development Department for review and approval prior to be granted a grading permit BIO-1b **Biological Reconnaissance-Level Survey**. The biological reconnaissance-level survey shall include, but not be limited to: • An analysis of available literature and biological databases including but not limited to: California Department of Fish and Wildlife (CDFW); California Natural Diversity Database (CNDDB); California Native Plant Society (CNPS) Inventory of Rare and Endangered Plants of California, National Wetland Inventory Database (NWI); USGS National Hydrographic Dataset (NHD); EcoAtlas; and database searches of the US Fish and Wildlife Service Critical Habitat, Environmental Conservation Online System (ECOS), and Information, Planning, and Conservation System (IPaC). The literature review shall be performed prior to the field survey to identify sensitive biological resources that were reported previously from the proposed development project vicinity and to help determine the type of sensitive biological resources that may be in the survey area.	Less than significant with mitigation incorporated

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Table ES-2 Summary of Environmental Impacts, Mitigation Measures and Levels of Significance After Mitigation

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
		• A review of current land use and land ownership within the proposed development project vicinity. • A field assessment survey that includes mapping vegetation communities in the proposed development project (including but not limited to project footprint, proposed access roads, staging and laydown areas, and a suitable buffer) utilizing the Manual of California Vegetation, 2nd edition (MCV) and the National Vegetation Classification System (NVCS) or the currently accepted standard for vegetation mapping and classification. An evaluation of each mapped vegetation community's State and Global rarity ranks shall be determined using CDFW's Vegetation Classification and Mapping Program (VegCAMP). • An evaluation of the proposed development project's potential to support special status plant and wildlife species. • An evaluation of nesting habitat for migratory and special status bird species. • An evaluation of potential impacts to bats and roosts from ground-disturbing activities. • A general assessment of potential jurisdictional areas, including wetlands and riparian habitats. • An evaluation of potential local and regional wildlife movement corridors. BIO-1c **Focused Species Surveys**. If one or more special status plant or animal species has the potential to occur within the proposed development project area (including but not limited to project footprint, proposed access roads, staging and laydown areas, and a suitable buffer), a qualified biologist shall conduct additional focused surveys for said species using the most recently updated protocols recommended by natural resource agencies or, if not available, standards accepted in the professional biological community to survey that taxonomic group, community, or species. If an established protocol is not available for a special status species, the qualified biologist will consult with the City and CDFW or USFWS to determine the appropriate survey protocol. The focused species survey(s) will be at a level to determine the presence/absence of these species and to adequately evaluate potential direct and/or indirect impacts to these species. Adjoining properties shall also be surveyed (as access permits) where direct or indirect project effects, such	

Table ES-2 Summary of Environmental Impacts, Mitigation Measures and Levels of Significance After Mitigation

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
		as those from fuel modification or herbicide application, could potentially extend off-site. To the extent possible, the focused species surveys should be conducted during nondrought years at the time of year when species are both evident and identifiable. The focused survey shall record the location and boundary of special status species by use of global positioning system (GPS). The number of individuals shall be counted (if population is small) or estimated (if population is large). If applicable, information about the percentage of individuals in each life stage should be provided (seedlings, reproductive individuals, adults, nestlings, juveniles, transients or migrant individuals, etc.). If feasible, images of the target species and representative habitats should be included to support information and descriptions. Results of focused species surveys shall be summarized in the proposed development project's Biological Technical Report. BIO-1d **Biological Resources Report**. The results of the biological survey for proposed development projects with no significant impacts may be presented in a biological survey letter report. For proposed development projects with significant impacts that require mitigation to reduce the impacts to below a level of significance, and/or agency consultation and permitting, the results of the biological survey shall be presented in a biological technical report. The impact analysis shall consider impacts from areas subject to fuel modification and grading to accommodate the development. BIO-2 **Special-Status Species, Sensitive Habitats, Wetlands, Other Non-wetland Waters, Native Wildlife Nursery Sites, and Wildlife Corridors**. If a sensitive biological resource is identified during field surveys (see BIO-1b and BIO-1c), the City shall require implementation of mitigation measures at the project level that fully account for the adversely affected resource. To the maximum extent feasible, mitigation measures should adhere to the following order of priority to reduce adverse impacts of a proposed project to the resource: avoid impacts, minimize impacts, and compensate for impacts. Mitigation measures shall be used on a project-level basis and be tailored to on-site conditions and sensitive biological resources present. • **Priority 1, Avoidance of Impacts**. Proposed development shall avoid impacts to the maximum extent feasible by not taking certain actions or parts of an action. Projects shall be sited to avoid direct or indirect impacts on the resource and include measures such as implementing no-	

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Table ES-2 Summary of Environmental Impacts, Mitigation Measures and Levels of Significance After Mitigation

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
		disturbance buffers (e.g., nesting bird buffer areas during construction, siting staging areas outside buffer area) or implementing project-specific design features (e.g., wildlife-friendly fencing and lighting in a wildlife corridor), such that indirect adverse effects of project development are avoided. This shall include flagging all plants and/or perimeter of populations; stop-work buffers around plants and/or populations (e.g., flagged perimeter plus 50 feet); restrictions on ground-disturbing activities within protected areas; relocation of staging and other material piling areas away from protected areas; restrictions on herbicide use and/or type of herbicide and/or application method within 100 feet of sensitive plants; and worker education and training. This shall especially apply to the Tierra Rejada Vernal Pool Preserve in the Carlsberg Specific Plan area and designated critical habitat for Lyon's pentachaeta and Riverside fairy shrimp (Streptocephalus woottoni) in the southeast corner of Moorpark. • **Priority 2, Minimize Impacts**. Proposed development shall be conditioned to minimize adverse impacts by limiting the degree or magnitude of the action and its implementation to less than significant to the maximum extent feasible. Other mitigation measures may include reducing or eliminating the impact over time by preservation and maintenance operations during the life of the action. Measures to mitigate the spread of invasive plant species and invasive wildlife species (e.g., New Zealand mudsnail) shall include but will not be limited to: cleaning of equipment, footwear, and clothing before entering a construction site and the identification and treatment of significant infestations of invasive plant species within a project site. • **Priority 3, Offset Impacts**. Offsetting impacts can be done by replacing or providing substitute resources or by rectifying the impact by repairing, rehabilitating, or restoring the impacted environment. Offset mitigation ratios for protected sensitive resources will be established based on the rarity of the resource, quality of affected habitat associated with the resource, temporary and permanent losses to habitat function, the type of mitigation proposed (restoration, enhancement, preservation, establishment), and other requirements associated with state or federal permits. Mitigation ratios will be determined at the project level in consultation with the city, the qualified biologist, and, where applicable,	

Table ES-2 Summary of Environmental Impacts, Mitigation Measures and Levels of Significance After Mitigation

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
		federal or state agencies with jurisdiction over the resource (e.g., CDFW, USACE, USFWS). If impacts on a protected sensitive biological resource are unavoidable, then the project proponent shall mitigate for the type of resource as follows: • Endangered, Rare, Threatened, or Candidate Species. The applicant shall obtain incidental take authorization from USFWS (16 US Code Section 1531 et seq.) or CDFW (California Fish and Game Code Sections 2050–2115.5) prior to commencing development of the project site; apply minimization measures or other conditions required under the incidental take authorization; and provide equivalent compensation for the unavoidable losses of these resources, generally at a minimum ratio of 1:1. Compensation may include purchasing credits from a USFWS- or CDFW-approved mitigation bank or restoring or enhancing habitat within the project site or outside of the project site. • Special Status Species (not listed). The applicant shall provide equivalent compensation for impacts on special status species by restoring or significantly enhancing existing habitat where the species occurs or by acquiring or protecting land that provides habitat function for affected species and is at least equivalent to the habitat function removed or degraded as a result of project implementation. If impacts on sensitive habitats, wetlands, other nonwetland waters, riparian habitats, native wildlife nursery sites, and wildlife corridors cannot be avoided, the project applicant shall: • Federal- or State-Protected Sensitive Habitats. Obtain the required regulatory authorization (e.g., Section 404 permits for impacts on waters of the United States, 401 water quality certification from the Regional Water Quality Control Board, a Streambed Alteration Agreement for impacts on aquatic or riparian habitats within CDFW jurisdiction under Fish and Game Code Section 1600), and provide equivalent compensation for the unavoidable losses of the above-mentioned resources such that there is no net loss. • Other Protected Sensitive Habitats (includes sensitive natural communities, habitat connectivity and wildlife corridors, native wildlife nursery or overwintering sites). Provide compensation for other protected	

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Table ES-2 Summary of Environmental Impacts, Mitigation Measures and Levels of Significance After Mitigation

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
		sensitive habitats, which may include the restoration, enhancement, or preservation of the aforementioned habitats within or outside of the project site, or the purchasing of credits at an existing mitigation bank or in-lieu fee program deemed acceptable by the Moorpark Community Development Director. All compensatory mitigation sites shall be protected in perpetuity through a conservation easement (if off-site), or deed restriction (or other comparable legal instrument) if on-site. BIO-3 **Demarcate Work Area Boundary**. The proposed development proponent shall prevent impacts to unprotected common and sensitive vegetation communities in areas adjacent to the project area. Prior to the initial vegetation clearing activities or ground disturbance in new areas, the approved project grading limits shall be marked with stakes or other highly visible materials that will be clearly visible to equipment operators and biological monitors during all vegetation clearing or ground disturbing activities. All equipment operators and project personnel shall be instructed about the restrictions the boundary markers represent and that vegetation removal or other disturbance outside of the boundary markers shall be avoided. BIO-4 **Preconstruction Special Status Species Surveys**. If sensitive biological resources are identified as having potential to occur within or immediately adjacent to the proposed development project area, a preconstruction special status species survey shall be conducted by a qualified biologist no more than 14 days prior to ground disturbing activities to ensure unsubstantiated impacts are avoided or minimized to the extent feasible. In addition, for species with potential to occur within or adjacent to the proposed development project area and having species-specific preconstruction or take avoidance survey guidelines (e.g. burrowing owl), surveys shall be conducted in accordance with the most recent survey guidelines by a qualified biologist for that species. BIO-5 **Worker Environmental Awareness Education**. If sensitive biological resources are known to occur within or adjacent to the proposed development project area, a project-specific contractor training program shall be developed and implemented to educate project contractors about the sensitive biological resources within and adjacent to the proposed development project area and the measures being implemented to avoid and/or minimize impacts to these	

Table ES-2 Summary of Environmental Impacts, Mitigation Measures and Levels of Significance After Mitigation

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
		species or their habitat. A qualified biologist shall develop and implement the contractor training program. BIO-6 **Biological Monitoring**. If sensitive biological resources are present within or adjacent to the proposed development project area and impacts may occur from implementation of construction activities, a qualified biological monitor may be required during a portion or all of the construction activities to ensure impacts to the sensitive biological resources are avoided or minimized to the extent feasible. The specific biological monitoring requirements shall be evaluated on a project-by-project basis. The qualified biological monitor shall be approved by the City on a project-by-project basis based on applicable experience with the sensitive biological resources that may be impacted.	
Impact 5.4-2: Implementation of the proposed Moorpark General Plan 2050 could impact sensitive natural communities, including wetlands and riparian habitat.	Potentially significant	Mitigation Measures BIO-1 through BIO-6 are also applicable to Impact 5.4-2. BIO-7 **Aquatic Resources Delineation and Regulatory Permitting**. The City of Moorpark shall require applicants of development projects that have the potential to affect jurisdictional resources to contract with a qualified biologist to conduct a jurisdictional delineation to map the extent of wetlands and nonwetland waters; determine jurisdiction; consider changes in upstream and downstream drainage patters, runoff, and sedimentation; and assess potential impacts (including an evaluation of potential changes in upstream and downstream drainage patterns, runoff, and sedimentation). The delineation shall be conducted pursuant to the U.S. Fish and Wildlife Service wetland definition adopted by the California Department of Fish and Wildlife. The results of the delineation shall be presented in a wetland delineation report and shall be incorporated into the CEQA document(s) required for approval and permitting of the proposed development project. Applicants of development projects that have the potential to impact jurisdictional features, as identified in the wetland delineation letter report, shall obtain permits and authorizations from the US Army Corps of Engineers for a Section 404 Clean Water Act (CWA) Permit, to the California Department of Fish and Wildlife (CDFW) for a Section 1600 Lake or Streambed Alteration Agreement (SAA), and/or to the Regional Water Quality Control Board (RWQCB) for a Section 401 Water Quality Certification. The regulatory agency authorization(s) shall include impact avoidance and minimization	Significant and Unavoidable (cumulative habitat loss)

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Table ES-2 Summary of Environmental Impacts, Mitigation Measures and Levels of Significance After Mitigation

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
		measures as well as mitigation measures for unavoidable impacts. Specific avoidance, minimization, and mitigation measures for impacts to jurisdictional resources shall be determined through discussions with the regulatory agencies during the proposed development project permitting process and may include monetary contributions to a mitigation bank or habitat creation, restoration, or enhancement.	
Impact 5.4-3: Buildout of the Moorpark General Plan 2050 could impact undetermined amounts of wetlands and jurisdictional waters regulated by the US Army Corps of Engineers, California Department of Fish and Wildlife, and Los Angeles Regional Water Quality Control Board.	Potentially significant	Mitigation Measure BIO-7 is also applicable to Impact 5.4-3.	Less than significant with mitigation incorporated
Impact 5.4-4: Development pursuant to the Moorpark General Plan 2050 could adversely impact wildlife movement in the Santa Monica–Sierra Madre Connection Corridor.	Potentially significant	BIO-8 **Habitat Connectivity/Wildlife Corridor Protection Measures**. The city of Moorpark shall require a habitat connectivity/wildlife corridor evaluation for future development projects that may impact existing connectivity areas and wildlife linkages identified in Figure 5.4-4, Regional Wildlife Corridor, of the Draft EIR, which includes the Santa Monica–Sierra Madre Connection corridor. The results of the evaluation shall be incorporated into the project's biological report required under Mitigation Measure BIO-1d. The evaluation shall also identify project design features that would reduce potential impacts and maintain habitat and wildlife movement. The city shall continue to work in partnership with the County of Ventura, wildlife agencies, organizations, and entities responsible for the protection, management, and enhancement of habitat connectivity and wildlife corridors. To this end, the city shall incorporate the following measures, to the extent practicable, for projects impacting wildlife movement corridors: • Adhere the applicable zoning standards. • Encourage clustering of development. • Avoid known sensitive biological resources and protect critical linkage areas in place with a minimum 1/2-mile buffer around pinch points, to maximum extent practicable).	Less than significant with mitigation incorporated

Table ES-2 Summary of Environmental Impacts, Mitigation Measures and Levels of Significance After Mitigation

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures		Level of Significance After Mitigation
			• Require new or modified road crossings over streams, wetlands and riparian habitats to include bridging design features with bridge columns located outside the riparian habitat areas, when feasible. • Avoid removal of native trees; large, dense-canopied nonnative trees; and understory vegetation. If impacts to trees cannot be avoided, trees should be replaced. • Follow the existing shielded lighting requirements in the existing municipal code to provide reduced lighting adjacent to sensitive habitat areas. • Encourage development plans that maximize wildlife movement. • Provide buffers between development and wetland/riparian areas. • Protect wetland/riparian areas through regulatory agency permitting process. • Encourage wildlife-passable fence designs (e.g., 3-strand barbless wire fence) on property boundaries. • Encourage preservation of native habitat on the undeveloped remainder of developed parcels. • Minimize road/driveway development to help prevent loss of wildlife due to roadkill and habitat loss. • Use native, drought-resistant plant species and trees in landscape design. Trees may include coast live oak (Quercus agrifolia) and California sycamore (Platanus racemosa) and other plants identified by the Audubon Society's Plants for Birds. • Encourage participation in local/regional recreational trail design efforts.	
Impact 5.4-5: Migratory birds known to occur in Moorpark would be protected under the Migratory Bird Treaty Act.	Potentially significant	BIO-9a	**Pre-disturbance Nesting Bird Surveys.** The City of Moorpark shall require applicants for future development projects with suitable natural habitat, subject to the discretion of the Community Development Director, to contract with a qualified biologist with experience in conducting breeding bird surveys to conduct a preconstruction general nesting bird survey within all suitable nesting habitats that may be directly (active nest destruction, direct mortality) or indirectly (nest abandonment, exposure) impacted by active construction during the general avian breeding season (February 1 through August 31). The pre-disturbance surveys shall be conducted no more than 5 days prior to initiation of construction inclusive of staking and fencing of project limits,	Less than significant with mitigation incorporated

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Table ES-2 Summary of Environmental Impacts, Mitigation Measures and Levels of Significance After Mitigation

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
		demolition activities, staging of equipment, and all vegetation trimming and removal activities (regardless of stage of construction). Results of pre-disturbance nesting bird surveys are typically valid for a period of 3 to 5 days. Additional pre-disturbance nesting bird surveys and/or nest monitoring may be required at the discretion of the qualified biologist based on observations of breeding behavior, phased removal of breeding bird habitat during the breeding season, establishment of nest buffers, delays in construction activities that could allow for breeding birds to establish a nest, or if the project is cleared/demolished/constructed over the course of multiple breeding seasons. Results will be summarized in a pre-disturbance survey report that describes the dates of the surveys, methods, results of the surveys, and any nest protection measures that will need to be employed. The pre-disturbance nesting bird survey report will be submitted to the City within 30 days of completion of the initial pre-disturbance nesting bird survey.	
		BIO-9b **Active Next Avoidance and No-Work Buffers.** If active nests of avian species protected by the Migratory Bird Treaty Act and Fish and Game Code are detected within the proposed development project area or within a 300-foot buffer (500-foot buffer for raptors and listed species) of the proposed development project area, a no-work buffer will be established around the nest (typically 300 feet for passerines and 500 feet for raptors and listed species) and construction shall be restricted in the area until the young have fledged; there is no evidence of a second attempt at nesting if the nest attempt has failed, as determined by the qualified biologist; or until appropriate protection measures (installation of noise and/or visual barriers, intermittent halting or rerouting of high noise-producing construction activities to other portions of the project area, biological monitoring, and/or noise monitoring to ensure effectiveness of no-work buffers and/or noise reduction measures, etc.) that respond to the specific situation have been developed and implemented in consultation with the City and regulatory agencies. A figure showing the locations of no work buffers established during the preclearance nesting survey shall be included in the predisturbance survey report (BIO-9a).	
		BIO-9c **Nest Monitoring**. Periodic nest monitoring will be conducted at the discretion of the qualified biologist to ensure compliance with established no-work buffers and document progression of the nest. The qualified biologist will	

Table ES-2 Summary of Environmental Impacts, Mitigation Measures and Levels of Significance After Mitigation

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
		monitor the nest from a distance and determine active/inactive status based on direct observations or evidence of breeding behavior (nest exchanges, food carries, fecal sac removal, nestling vocalizations, etc.). The qualified biologist will keep the nest monitoring as brief as possible to avoid causing undue stress to the adult(s) and young. For nests where contents are difficult to determine (e.g., gourd nests, cavity nests) or nests that seem inactive prior to the estimated fledge date, the nest will be considered inactive once nesting activity is no longer observed at the nest site during two consecutive monitoring visits by the qualified biologist. Two consecutive monitoring visits may not be necessary if strong evidence (e.g., nest is on the ground or evidence of predation on young) indicates the nest is no longer active or if the nest is unlikely to be affected by immediate project activities. Once a nest is deemed inactive by the qualified biologist and there is no evidence of a second nest attempt or other active nests in the same area, the biologist will deactivate the nest buffer and construction activities may resume in that area. CDFW will not need to concur with the nest "deactivation" determination prior to work resuming in the area. Project-related activities that result in loss of a nest ("take") will be immediately reported to the city and appropriate agencies (CDFW, USFWS). A summary of all nest monitoring activities (if any) will be submitted to the City in a brief memo at the completion of each breeding season.	
Impact 5.4-6: Future projects in accordance with the Moorpark General Plan 2050 would be required to comply with the Moorpark Highland HCP, and Moorpark's local biological resources policies and ordinances.	Less than significant	No mitigation measures are warranted.	Less than significant
5.5 CULTURAL RESOURCES			
Impact 5.5-1: Buildout of the City of Moorpark General Plan 2050 could impact an identified historic resource.	Potentially significant	CUL-1 **Historical Resources Assessment**. Prior to any construction activities that may affect historical resources (i.e., structures 45 years or older), a historical resources assessment shall be performed by an architectural historian or a historian who meets the Secretary of the Interior's Professionally Qualified Standards in architectural history or history. The assessment shall include a records search to determine if any resources that may be potentially affected by the project have been previously recorded, evaluated, and/or designated in	Significant and unavoidable

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Table ES-2 Summary of Environmental Impacts, Mitigation Measures and Levels of Significance After Mitigation

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
		the National Register of Historic Places, California Register of Historic Resources, or local register of historic resources. Following the records search, the qualified historian or architectural historian shall conduct a reconnaissance-level and/or intensive-level survey in accordance with the California Office of Historic Preservation guidelines to identify any previously unrecorded potential historical resources that may be potentially affected by the proposed project. Pursuant to the definition of a historical resource under CEQA, potential historical resources shall be evaluated under a developed historic context. CUL-2 **Historical Resources Standards.** To ensure that projects requiring the relocation, rehabilitation, or alteration of a historical resource do not impair its significance, the Secretary of the Interior's Standards for the Treatment of Historic Properties shall be used to the maximum extent possible. The application of the standards shall be overseen by a qualified architectural historian or historic architect meeting the Secretary of the Interior's Professionally Qualified Standards. Prior to any construction activities that may affect the historical resource, a report identifying and specifying the treatment of character-defining features and construction activities shall be provided to the City of Moorpark. CUL-3 **Historical Resources Documentation**. If a proposed project would result in the demolition or significant alteration of a historical resource, it cannot be mitigated to a less than significant level. However, recordation of the resource prior to construction activities will assist in reducing adverse impacts to the greatest extent possible. Recordation shall take the form of Historic American Buildings Survey (HABS), Historic American Engineering Record (HAER), or Historic American Landscape Survey (HALS) documentation and shall be performed by an architectural historian or historian who meets the Secretary of the Interior's Professionally Qualified Standards. Documentation shall include an architectural and historical narrative; medium- or large-format black and white photographs, negatives, and prints; and supplementary information such as building plans and elevations and/or historic photographs. Documentation shall be reproduced on archival paper and placed in appropriate local, state, or federal institutions. The specific scope and details of documentation would be developed at the project level.	

Table ES-2 Summary of Environmental Impacts, Mitigation Measures and Levels of Significance After Mitigation

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
		CUL-4 **Eligible Cultural Resources Measure**. If cultural resources that are eligible for listing in the National Register of Historic Places, California Register of Historic Resources, or local register of historic resources are identified within or adjacent to the proposed development, the construction limits shall be clearly flagged to ensure impacts to eligible cultural resources are avoided or minimized to the extent feasible. Prior to implementing construction activities, a qualified archaeologist shall verify that the flagging clearly delineates the construction limits and eligible resources to be avoided. Since the location of some eligible cultural resources is confidential, these resources will be flagged as environmentally sensitive areas.	
Impact 5.5-2: Future development in the city that would be accommodated by the Moorpark General Plan 2050 could impact known and unknown archaeological resources.	Potentially significant	CUL-5 **High and Assumed-High Sensitivity**. To determine the archaeological sensitivity for discretionary projects in areas designated "high" and "assumed-high" sensitivity for archeological resources, an archaeological resources assessments shall be performed under the supervision of an archaeologist that meets the Secretary of the Interior's Professionally Qualified Standards (PQS) in either prehistoric or historic archaeology. The assessments shall include records searches of the California Historical Resources Information System and the Sacred Lands File maintained by the Native American Heritage Commission. The records searches shall determine if the proposed project has been previously surveyed for archaeological resources, identify and characterize the results of previous cultural resource surveys, and disclose any cultural resources that have been recorded and/or evaluated. A Phase I pedestrian survey shall be undertaken in areas that are undeveloped to locate any surface cultural materials. a. If potentially significant archaeological resources are identified through an archaeological resources assessment, and impacts to these resources cannot be avoided, a Phase II Testing and Evaluation investigation to determine significance shall be performed by an archaeologist who meets the PQS prior to any construction-related ground-disturbing activities. If resources are determined significant or unique through Phase II testing and site avoidance is not possible, appropriate site-specific mitigation measures shall be established and undertaken. These might include a Phase III data recovery program that would be implemented by a qualified archaeologist and performed in accordance with the Office of Historic Preservation's Archaeological	Less than significant with mitigation incorporated

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Table ES-2 Summary of Environmental Impacts, Mitigation Measures and Levels of Significance After Mitigation

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
		Resource Management Reports (ARMR): Recommended Contents and Format (1990) and Guidelines for Archaeological Research Designs (1991). b. If the archaeological assessment did not identify potentially significant archaeological resources within the proposed General Plan area but indicated the area to be highly sensitive for archaeological resources, a qualified archaeologist shall monitor all ground-disturbing construction and pre-construction activities in areas with previously undisturbed soil. The archaeologist shall inform all construction personnel, prior to construction activities, of the proper procedures in the event of an archaeological discovery. The training shall be held in conjunction with the project's initial on-site safety meeting and shall explain the importance and legal basis for the protection of significant archaeological resources. In the event that archaeological resources (artifacts or features) are exposed during ground-disturbing activities, construction activities in the immediate vicinity of the discovery shall be halted while the resources are evaluated for significance by an archaeologist who meets the PQS. If the discovery proves to be significant, it shall be curated with a recognized scientific or educational repository. c. If the archaeological assessment did not identify potentially significant archaeological resources, but indicates the area to be of medium sensitivity for archaeological resources, an archaeologist who meets the PQS shall be retained on an on-call basis. The archaeologist shall inform all construction personnel prior to construction activities about the proper procedures in the event of an archaeological discovery. The training shall be held in conjunction with the project's initial on-site safety meeting, and shall explain the importance and legal basis for the protection of significant archaeological resources. In the event that archaeological resources (artifacts or features) are exposed during ground-disturbing activities, construction activities in the immediate vicinity of the discovery shall be halted while the on-call archaeologist is contacted. If the discovery proves to be significant, it shall be curated with a recognized scientific or educational repository.	

Table ES-2 Summary of Environmental Impacts, Mitigation Measures and Levels of Significance After Mitigation

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
		CUL-6 **Low-Sensitivity.** To determine the archaeological sensitivity for discretionary projects in areas designated "low" sensitivity for archeological resources, the project applicant shall retain an archaeologist that meets the Secretary of the Interior's Professionally Qualified Standards (PQS) in either prehistoric or historic archaeology to conduct a records search. The assessments shall include records searches of California Historical Resources Information System and the Sacred Lands File maintained by the Native American Heritage Commission. If the records search identifies a medium sensitivity for archaeological resources, an archaeologist who meets the PQS shall be retained on an on-call basis. The archaeologist shall inform all construction personnel prior to construction activities about the proper procedures in the event of an archaeological discovery. The training shall be held in conjunction with the project's initial on-site safety meeting and shall explain the importance and legal basis for the protection of significant archaeological resources. In the event that archaeological resources (artifacts or features) are exposed during ground-disturbing activities, construction activities in the immediate vicinity of the discovery shall be halted while the on-call archaeologist is contacted. If the discovery proves to be significant, it shall be curated with a recognized scientific or educational repository.	
Impact 5.5-3: Grading activities could potentially disturb human remains.	Less than significant	No mitigation measures are warranted.	Less than significant
5.6 ENERGY			
Impact 5.6-1: Implementation of the Moorpark General Plan 2050 would not result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources.	Less than significant	No mitigation measures are warranted.	Less than significant
Impact 5.6-2: The Moorpark General Plan 2050 would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency.	Less than significant	No mitigation measures are warranted.	Less than significant

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Table ES-2 Summary of Environmental Impacts, Mitigation Measures and Levels of Significance After Mitigation

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
5.7 GEOLOGY AND SOILS			
Impact 5.7-1: Moorpark residents [or occupants, visitors, etc.] would be subject to potential seismic-related hazards; however, development associated with the Moorpark General Plan 2050 would adhere to existing structural safety requirements.	Less than significant	No mitigation measures are warranted.	Less than significant
Impact 5.7-2: Unstable geologic units or soils conditions, including soil erosion, could result from development associated with the Moorpark General Plan 2050; however, such development would adhere to existing regulatory requirements.	Less than significant	No mitigation measures are warranted.	Less than significant
Impact 5.7-3: Soil conditions in Moorpark could result in risks to life or property; however, development associated with the Moorpark General Plan 2050 would be required to comply with existing regulations.	Less than significant	No mitigation measures are warranted.	Less than significant
Impact 5.7-4: Sewer flows from new development associated with buildout of the Moorpark General Plan 2050 would be sewered by the Ventura County Waterworks District No. 1.	Less than significant	No mitigation measures are warranted.	Less than significant
Impact 5.7-5: Future development that would be accommodated by the Moorpark Park General Plan 2050 could impact known and unknown paleontological resources.	Potentially significant	GEO-1 **Paleontological Resources Monitoring and Mitigation Plan**. In areas designated "high" or "low" sensitivity for paleontological resources, the project applicant shall be required to submit a Paleontological Resources Monitoring and Mitigation Plan (PRMMP). The PRMMP shall be prepared by a Qualified Paleontologist meeting the standards of Society of Vertebrate Paleontology (2010). The plan shall address specifics of monitoring and mitigation based on the project area and project's construction plan, and shall take into account updated geologic mapping, geotechnical data, updated paleontological records searches, and changes to the regulatory framework at the time of	Less than significant with mitigation incorporated

Table ES-2 Summary of Environmental Impacts, Mitigation Measures and Levels of Significance After Mitigation

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
		analysis. The PRMMP shall be submitted to the City of Moorpark prior to approval of a grading permit. GEO-2 **High Sensitivity**. Projects involving ground disturbances in previously undisturbed areas mapped as having "high" paleontological sensitivity shall be monitored by a qualified paleontological monitor on a full-time basis. Monitoring shall include inspection of exposed sedimentary units during active excavations within sensitive geologic sediments. The monitor shall have authority to temporarily divert activity away from exposed fossils to evaluate the significance of the find and, if the fossils are determined to be significant, professionally and efficiently recover the fossil specimens and collect associated data. The paleontological monitor shall use field data forms to record pertinent location and geologic data, measure stratigraphic sections (if applicable), and collect appropriate sediment samples from any fossil localities. GEO-3 **Low Sensitivity**. Projects involving ground disturbance in previously undisturbed areas mapped with "low" paleontological sensitivity shall require monitoring if construction activity exceeds the depth of the low-sensitivity surficial sediments. The underlying sediments may have high sensitivity; therefore, work in those units shall require paleontological monitoring, as designated by the qualified paleontologist in the Paleontological Resources Monitoring and Mitigation Plan. GEO-4 **All Projects**. In the event of any fossil discovery, regardless of depth or geologic formation, construction work shall halt within a 50-foot radius of the find until its significance can be determined by a qualified paleontologist. Significant fossils shall be recovered, prepared to the point of curation, identified by qualified experts, listed in a database to facilitate analysis, and deposited in a designated paleontological curation facility in accordance with the standards of the Society of Vertebrate Paleontology (2010). A regional repository shall be identified by the City Council and a curatorial arrangement shall be signed prior to collection of the fossils.	

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Table ES-2 Summary of Environmental Impacts, Mitigation Measures and Levels of Significance After Mitigation

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
5.8 GREENHOUSE GAS EMISSIONS			
Impact 5.8-1: Implementation of the Moorpark General Plan 2050 would result in a substantial increase in emissions, and emissions in the city would not be aligned with a trajectory to achieve the goals established under Assembly Bill 1279 or progress toward the State's carbon neutrality goal.	Potentially significant	The Moorpark General Plan 2050 includes a new Conservation Element Policy COS-8.2, which would require the city to cooperate with regional partners to develop and implement a Climate Action Plan to achieve the GHG reduction targets of SB 32 and AB 1279.	Significant and Unavoidable
Impact 5.8-2: Implementation of the Moorpark General Plan 2050 would not conflict with an applicable plan, policy, or regulation of an agency adopted for the purpose of reducing GHG emissions.	Less than significant	No mitigation measures are warranted.	Less than significant
5.9 HAZARDS AND HAZARDOUS MATERIALS			
Impact 5.9.1: Implementation of the Moorpark General Plan 2050 would not create a significant hazard to the public or the environment through the routine transport, use, and/or disposal of hazardous materials.	Less than significant	No mitigation measures are warranted.	Less than significant
Impact 5.9-2: Parcels in Moorpark are listed on hazardous materials sites pursuant to Government Code Section 65962.5.	Potentially significant	HAZ-1 **Phase I Environmental Site Assessment**. Prior to discretionary approval by the City of Moorpark for development of projects subject to review under the California Environmental Quality Act (CEQA) (i.e., nonexempt projects), project applicants shall prepare and submit a Phase I Environmental Site Assessment (ESA) evaluating potential project impacts associated with recognized environmental conditions to the City of Moorpark Community Development Department for review and approval prior to initiation of construction activities. The evaluation shall be prepared in conformance with American Society of Testing and Materials (ASTM) methodology for assessing impacts. If there are recognized environmental conditions, the City of Moorpark shall require feasible mitigation measures to remediate the site. Potential measures shall be incorporated as conditions of approval for a project and may include:	Less than significant with mitigation incorporated

Table ES-2 Summary of Environmental Impacts, Mitigation Measures and Levels of Significance After Mitigation

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
		• Preparation of and mandatory adherence to a Soils Management Plan (SMP). The SMP would summarize soil and groundwater analytical data collected on the project site during past investigations; identify management options for excavated soil and/or groundwater if contaminated media are encountered during deep excavations; and identify monitoring wells, irrigation wells, or other wells requiring proper abandonment in compliance with local, State, and federal laws, policies, and regulations. The SMP shall include measures for identifying, testing, and managing soil and/or groundwater suspected of or known to contain hazardous materials. The SMP should: ○ Provide procedures for evaluating, handling, storing, testing, and disposing of soil and groundwater during project excavation and dewatering activities, respectively. ○ Describe required worker health and safety provisions for all workers potentially exposed to hazardous materials in accordance with State and federal worker safety regulations. ○ Designate personnel responsible for implementation of the SMP. • Preparation of and mandatory adherence to the recommendations from a Soil Vapor Intrusion Assessment for sites with potential residual contamination in soil or groundwater that are planned for development with an overlying occupied building. A Soil Vapor Intrusion Assessment would indicate the potential for significant vapor intrusion into an occupied building. Project design for all projects with significant vapor intrusion shall include vapor controls or source removal, as appropriate, in accordance with regulatory agency requirements. Soil vapor mitigations or controls could include vapor barriers, passive venting, and/or active venting.	
Impact 5.9-3: The project site is not located in the vicinity of an airport or within the jurisdiction of an airport land use plan.	No impact	No mitigation measures are warranted.	No impact
Impact 5.9-4: Project implementation would not impair the implementation of or physically interfere with and adopted emergency response plan or emergency evacuation plan	Less than significant	No mitigation measures are warranted.	Less than significant

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Table ES-2 Summary of Environmental Impacts, Mitigation Measures and Levels of Significance After Mitigation

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
Impact 5.9-5: Portions of the City of Moorpark are within the Very High Fire Hazards Severity Zone and/or wildland-urban interface and could expose structures and/or residences to fire danger.	Potentially significant	No feasible mitigation measures are available.	Significant and Unavoidable
5.10 HYDROLOGY AND WATER QUALITY			
Impact 5.10-1: Projects pursuant to the Moorpark General Plan 2050 would not violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality.	Less than significant	No mitigation measures are warranted.	Less than significant
Impact 5.10-2: Projects pursuant to the Moorpark General Plan 2050 would increase the demand on groundwater use but would not impede sustainable groundwater management of the basin.	Less than significant	No mitigation measures are warranted.	Less than significant
Impact 5.10-3: Projects pursuant to the Moorpark General Plan 2050 would increase the amount of impervious surfaces in the plan area, but would not substantially increase the rate or amount of surface runoff in a manner which would result in flooding off-site or on-site, or contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems.	Less than significant	No mitigation measures are warranted.	Less than significant
Impact 5.10-4: In flood hazard, tsunami, or seiche zones, development pursuant to the Moorpark General Plan 2050 would not risk release of pollutants due to project inundation or impede or redirect flood flows.	Less than significant	No mitigation measures are warranted.	Less than significant

Table ES-2 Summary of Environmental Impacts, Mitigation Measures and Levels of Significance After Mitigation

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
Impact 5.10-5: Projects pursuant to the Moorpark General Plan 2050 would not conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan.	Less than significant	No mitigation measures are warranted.	Less than significant
5.11 LAND USE AND PLANNING			
Impact 5.11-1: Project implementation would not divide an established community.	Less than significant	No mitigation measures are warranted.	Less than significant
Impact 5.11-2: Project Implementation would not conflict with applicable plans adopted for the purpose of avoiding or mitigating an environmental effect.	Less than significant	No mitigation measures are warranted.	Less than significant
5.12 MINERAL RESOURCES			
Impact 5.12-1: Project implementation would not result in the loss of availability of a known mineral resource.	No impact	No mitigation measures are warranted.	No impact
5.13 NOISE			
Impact 5.13-1: Construction activities associated with buildout of the Moorpark General Plan 2050 would result in temporary noise increases at sensitive receptors.	Potentially significant	N-1 **Construction Noise Measures**. Construction contractors shall implement the following measures for construction activities conducted in the City of Moorpark. Construction plans submitted to the City shall identify these measures on demolition, grading, and construction plans. The City of Moorpark Planning and Building Agency shall verify that grading, demolition, and/or construction plans submitted to the City include these notations prior to issuance of demolition, grading, and/or building permits. • During the entire active construction period, equipment and trucks used for project construction shall use 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. • Impact tools (e.g., jack hammers and hoe rams) shall be hydraulically or electrically powered wherever possible. Where the use of pneumatic tools	Significant and Unavoidable

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Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
		is unavoidable, an exhaust muffler on the compressed air exhaust shall be used along with external noise jackets on the tools. • Stationary equipment, such as generators and air compressors, shall be located as far as feasible from nearby noise-sensitive uses. • Stockpiling shall be located as far as feasible from nearby noise-sensitive receptors. • Construction traffic shall be limited, to the extent feasible, to approved haul routes established by the City Planning and Building Agency. • At least 10 days prior to the start of construction activities, a sign shall be posted at the entrance(s) to the job site, clearly visible to the public, that includes permitted construction days and hours, as well as the telephone numbers of the City's and contractor's authorized representatives that are assigned to respond in the event of a noise or vibration complaint. If the authorized contractor's representative receives a complaint, he/she shall investigate, take appropriate corrective action, and report the action to the City. • Signs shall be posted at the job site entrance(s), within the on-site construction zones, and along queueing lanes (if any) to reinforce the prohibition of unnecessary engine idling. All other equipment shall be turned off if not in use for more than 5 minutes. • During the entire active construction period and to the extent feasible, the use of noise-producing signals, including horns, whistles, alarms, and bells, shall be for safety warning purposes only. The construction manager shall use smart back-up alarms, which automatically adjust the alarm level based on the background noise level or switch off back-up alarms and replace with human spotters in compliance with all safety requirements and laws. • If construction is anticipated for prolonged periods, as required by the Community Development Director, erect temporary noise barriers (at least as high as the exhaust of equipment and breaking line-of-sight between noise sources and sensitive receptors), as necessary and feasible, to maintain construction noise levels at or below the performance standard of 80 dBA Leq. Barriers shall be constructed with a solid material that has a	

Table ES-2 Summary of Environmental Impacts, Mitigation Measures and Levels of Significance After Mitigation

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
		density of at least 4 pounds per square foot with no gaps from the ground to the top of the barrier.	
Impact 5.13-2: Buildout of the Moorpark General Plan 2050 would generate a substantial traffic noise increase on local roadways in areas that exceed established noise standards.	Potentially significant	No feasible mitigation measures are available.	Significant and Unavoidable
Impact 5.13-3: Buildout of the Moorpark General Plan 2050 may expose sensitive uses to excessive levels of groundborne vibration.	Potentially significant	N-2 **Noise and Vibration Analysis**. Prior to issuance of a building permit for a project requiring pile driving during construction within 135 feet of fragile structures, such as historical resources, within 100 feet of nonengineered timber and masonry buildings (e.g., most residential buildings), or within 75 feet of engineered concrete and masonry (no plaster); or a vibratory roller within 25 feet of any structure, the project applicant shall prepare a noise and vibration analysis to assess and mitigate potential noise and vibration impacts related to these activities. This noise and vibration analysis shall be conducted by a qualified and experienced acoustical consultant or engineer. The vibration levels shall not exceed Federal Transit Administration (FTA) architectural damage thresholds (e.g., 0.12 inches per second [in/sec] peak particle velocity [PPV] for fragile or historical resources, 0.2 in/sec PPV for nonengineered timber and masonry buildings, and 0.3 in/sec PPV for engineered concrete and masonry). If vibration levels would exceed these thresholds, alternative uses shall be used, such as drilling piles instead of pile driving and static rollers instead of vibratory rollers. If necessary, construction vibration monitoring shall be conducted to ensure vibration thresholds are not exceeded. N-3 **Vibration Analysis**. Prior to discretionary approval by the City of Moorpark for industrial development projects subject to review under the California Environmental Quality Act (CEQA) (i.e., nonexempt projects), that utilize equipment that has the potential to result in vibration, a vibration analysis shall be conducted to assess and mitigate potential vibration impacts. This vibration analysis shall be conducted by a qualified and experienced acoustical consultant or engineer and shall follow the latest CEQA guidelines, practices, and precedents.	Less than significant with mitigation incorporated

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Table ES-2 Summary of Environmental Impacts, Mitigation Measures and Levels of Significance After Mitigation

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
Impact 5.13-4: The proximity of the sensitive receptors in the city to an airport or airstrip would not result in exposure of future residents and/or workers to excessive airport-related noise.	No impact	No mitigation measures are warranted.	No impact
5.14 POPULATION AND HOUSING			
Impact 5.14-1: The proposed project would directly result in population growth in the project area.	Less than significant	No mitigation measures are warranted.	Less than significant
Impact 5.14-2: Project implementation would not result in displacing people and/or housing.	Less than significant	No mitigation measures are warranted.	Less than significant
5.15 PUBLIC SERVICES			
Impact 5.15-1: Buildout of the Moorpark General Plan 2050 would introduce new structures and residents/workers into the Ventura County Fire District service boundaries, thereby increasing the requirement for fire protection facilities and personnel.	Less than significant	No mitigation measures are warranted.	Less than significant
Impact 5.15-2: Buildout of the Moorpark General Plan 2050 would introduce new structures and residents/workers into the Ventura County Sheriff's Office service boundaries, thereby increasing the requirement for police protection facilities and personnel.	Less than significant	No mitigation measures are warranted.	Less than significant
Impact 5.15-3: Buildout of the Moorpark General Plan 2050 would generate new students in the Moorpark Unified School District service area, but payment of SB 50 fees would fully mitigate potential impacts to school facilities.	Less than significant	No mitigation measures are warranted.	Less than significant

Table ES-2 Summary of Environmental Impacts, Mitigation Measures and Levels of Significance After Mitigation

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
Impact 5.15-4: Buildout of the Moorpark General Plan 2050 would generate additional population growth but would not impact library facilities or services in Moorpark.	Less than significant	No mitigation measures are warranted.	Less than significant
5.16 RECREATION			
Impact 5.16-1: The proposed project would generate additional residents that would increase the use of existing park and recreational facilities and result in an increase in demand for new parks.	Less than significant	No mitigation measures are warranted.	Less than significant
Impact 5.16-2: Project implementation would result in environmental impacts to provide new and/or expanded recreational facilities.	Less than significant	No mitigation measures are warranted.	Less than significant
5.17 TRANSPORTATION			
Impact 5.17-1: The proposed project would not conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities.	Less than significant	No mitigation measures are warranted.	Less than significant
Impact 5.17-2: The Moorpark General Plan 2050 would achieve a 15 percent reduction in VMT compared to existing conditions.	Less than significant	No mitigation measures are warranted.	Less than significant
Impact 5.17-3: The Circulation Element adequately addresses potentially hazardous conditions (sharp curves, etc.) and potential conflicting uses.	Less than significant	No mitigation measures are warranted.	Less than significant

1. Executive Summary

Table ES-2 Summary of Environmental Impacts, Mitigation Measures and Levels of Significance After Mitigation

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
5.18 TRIBAL CULTURAL RESOURCES			
Impact 5.18-1: The proposed project could impact tribal cultural resources within Moorpark.	Potentially significant	TCR-1 **Tribal Cultural Resources Monitoring**. An archaeologist that meets the Secretary of the Interior's Professionally Qualified Standards (PQS), in consultation with interested tribes, the developer and the City of Moorpark, shall develop an Archaeological Monitoring Plan (AMP) to address the details, timing and responsibility of archaeological and cultural activities that will occur on the project site. Details in the AMP shall include: 1. Project-related ground disturbance (including, but not limited to, brush clearing, grading, trenching, etc.) and development scheduling; 2. The development of a rotating or simultaneous schedule in coordination with the developer and the project archeologist for designated Native American Tribal Monitors from the consulting tribes during grading, excavation and ground disturbing activities on the site: including the scheduling, safety requirements, duties, scope of work, and Native American Tribal Monitors' authority to stop and redirect grading activities in coordination with all project archaeologists (if the tribes cannot come to an agreement on the rotating or simultaneous schedule of tribal monitoring, the Native American Heritage Commission shall designate the schedule for the onsite Native American Tribal Monitor for the proposed project); 3. The protocols and stipulations that the developer, City, Tribes and project archaeologist will follow in the event of inadvertent cultural resources discoveries, including any newly discovered cultural resource deposits that shall be subject to a cultural resources evaluation. At least 30-days prior to application for a grading permit and before any grading, excavation and/or ground disturbing activities on the site take place, the future developer shall retain a tribal cultural monitor to monitor all ground-disturbing activities in an effort to identify any unknown archaeological resources. Pursuant to the AMP, a tribal monitor from the consulting tribe shall be present during the initial grading activities. If tribal resources are found during grubbing activities, the tribal monitoring shall be present during site grading activities.	Less than significant with mitigation incorporated

Table ES-2 Summary of Environmental Impacts, Mitigation Measures and Levels of Significance After Mitigation

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
		TCR-2 **Treatment and Disposition of Cultural Resources**. In the event that Native American cultural resources are inadvertently discovered during the course of any ground disturbing activities, including but not limited to brush clearance, grading, trenching, etc. grading for the proposed project, the following procedures will be carried out for treatment and disposition of the discoveries: 1. Temporary Curation and Storage: During the course of construction, all discovered resources shall be temporarily curated in a secure location onsite or at the offices of the project archaeologist. The removal of any artifacts from the project site will need to be thoroughly inventoried with tribal monitor oversite of the process; and 2. Treatment and Final Disposition: The landowner(s) shall relinquish ownership of all cultural resources, including sacred items, burial goods, and all archaeological artifacts and non-human remains as part of the required mitigation for impacts to cultural resources. The applicant shall relinquish the artifacts through one or more of the following methods and provide the City of Moorpark with evidence of same: a. Accommodate the process for onsite reburial of the discovered items with the consulting Native American tribes or bands. This shall include measures and provisions to protect the future reburial area from any future impacts. Reburial shall not occur until all cataloguing, basic analysis, and other analyses as recommended by the project archaeologist and approved by consulting tribes and basic recordation have been completed; all documentation should be at a level of standard professional practice to allow the writing of a report of professional quality; b. A curation agreement with an appropriate qualified repository within San Bernardino County that meets federal standards per 36 CFR Part 79 and therefore would be professionally curated and made available to other archaeologists/researchers for further study. The collections and associated records shall be transferred, including title, to an appropriate curation facility within San Bernardino County, to be accompanied by payment of the fees necessary for permanent curation; c. For purposes of conflict resolution, if more than one Native American tribe or band is involved with the project and cannot come to an	

Table ES-2 Summary of Environmental Impacts, Mitigation Measures and Levels of Significance After Mitigation

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
		agreement as to the disposition of cultural materials, they shall be curated at a regional museum, as directed by the City Council; d. At the completion of grading, excavation and ground disturbing activities on the site, a Phase IV Monitoring Report shall be submitted to the City documenting monitoring activities conducted by the project archaeologist and Native Tribal Monitors within 60 days of completion of grading. This report shall document the impacts to the known resources on the property; describe how each mitigation measure was fulfilled; document the type of cultural resources recovered and the disposition of such resources; provide evidence of the required cultural sensitivity training for the construction staff held during the required pre-grade meeting; and, in a confidential appendix, include the daily/weekly monitoring notes from the archaeologist. All reports produced will be submitted to the City, County Museum, and consulting tribes. TCR-3 During construction activities, the project applicant shall allow additional archaeological monitors of Native American tribes to access the project site on a volunteer basis to monitor grading and excavation activities.	
5.19 UTILITIES AND SERVICE SYSTEMS			
Impact 5.19-1: Development pursuant to the Moorpark General Plan 2050 could require or result in the relocation or construction of new or expanded wastewater facilities; however, their construction or relocation would not cause significant environmental effects.	Less than significant	No mitigation measures are warranted.	Less than significant
Impact 5.19-2: Wastewater generated by development pursuant to the Moorpark General Plan 2050 could be adequately treated by the wastewater service provider for the project.	Less than significant	No mitigation measures are warranted.	Less than significant

Table ES-2 Summary of Environmental Impacts, Mitigation Measures and Levels of Significance After Mitigation

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
Impact 5.19-3: Development pursuant to the Moorpark General Plan 2050 could require construction of new or expanded water (potable and nonpotable) facilities; however, the construction or relocation of which would not cause significant environmental effects.	Less than significant	No mitigation measures are warranted.	Less than significant
Impact 5.19-4: Available water supplies are sufficient to serve development pursuant to the Moorpark General Plan 2050 and reasonably foreseeable future development during normal, dry, and multiple dry years.	Less than significant	No mitigation measures are warranted.	Less than significant
Impact 5.19-5: Development pursuant to the Moorpark General Plan 2050 could require or result in the relocation or construction of new or expanded storm drainage facilities; however, their construction or relocation would not cause significant environmental effects.	Less than significant	No mitigation measures are warranted.	Less than significant
Impact 5.19-6: Existing and/or proposed facilities would not be able to accommodate solid waste generated by development pursuant to the Moorpark General Plan 2050 and comply with related solid waste regulations.	Less than significant	No mitigation measures are warranted.	Less than significant
Impact 5.19-7: Development pursuant to the Moorpark General Plan 2050 would not require or result in the relocation or construction of new or expanded electric power, natural gas, or telecommunication facilities.	Less than significant	No mitigation measures are warranted.	Less than significant

1. Executive Summary

Table ES-2 Summary of Environmental Impacts, Mitigation Measures and Levels of Significance After Mitigation

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
5.20 WILDFIRE			
Impact 5.20-1: Buildout of the Moorpark General Plan 2050 would not substantially impair an adopted emergency response plan or emergency evacuation plan.	Less than significant	No mitigation measures are warranted.	Less than significant
Impact 5.20-2: Development associated with buildout of the Moorpark General Plan 2030, due to slope, prevailing winds, and other factors, could exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire.	Potentially significant	No feasible mitigation measures are available.	Significant and Unavoidable
Impact 5.20-3: Development associated with the Moorpark General Plan 2050 could require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines, or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment.	Less than significant	No mitigation measures are warranted.	Less than significant
Impact 5.20-4: The proposed project would not 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.	Less than significant	No mitigation measures are warranted.	Less than significant

2. Introduction

2.1 PURPOSE OF THE ENVIRONMENTAL IMPACT REPORT

The California Environmental Quality Act (CEQA) requires that all state and local governmental agencies consider the environmental consequences of projects over which they have discretionary authority before taking action on those projects. This draft environmental impact report (DEIR) has been prepared to satisfy CEQA and the CEQA Guidelines. The environmental impact report (EIR) is the public document designed to provide decision makers and the public with an analysis of the environmental effects of the proposed project, to indicate possible ways to reduce or avoid environmental damage and to identify alternatives to the project. The EIR must also disclose significant environmental impacts that cannot be avoided; growth inducing impacts; effects not found to be significant; and significant cumulative impacts of all past, present, and reasonably foreseeable future projects.

The lead agency means "the public agency which has the principal responsibility for carrying out or approving a project which may have a significant effect upon the environment" (CEQA Section 21067). The City of Moorpark has the principal responsibility for approval of the Moorpark General Plan 2050. For this reason, the City of Moorpark is the CEQA lead agency for this project.

The intent of the DEIR is to provide sufficient information on the potential environmental impacts of the proposed Moorpark General Plan 2050 to allow the City of Moorpark to make an informed decision regarding approval of the project. Specific discretionary actions to be reviewed by the City are described in Section 3.4, *Intended Uses of the EIR*.

This DEIR has been prepared in accordance with requirements of the:

- California Environmental Quality Act (CEQA) of 1970, as amended (Public Resources Code, Sections 21000 et seq.)
- State Guidelines for the Implementation of the CEQA of 1970 (CEQA Guidelines), as amended (California Code of Regulations, Sections 15000 et seq.)

The overall purpose of this DEIR is to inform the lead agency, responsible agencies, decision makers, and the general public about the environmental effects of the development and operation of the proposed Moorpark General Plan 2050. This DEIR addresses effects that may be significant and adverse; evaluates alternatives to the project; and identifies mitigation measures to reduce or avoid adverse effects.

2.2 NOTICE OF PREPARATION AND INITIAL STUDY

The City of Moorpark determined that an EIR would be required for this project and issued a Notice of Preparation (NOP) on May 17, 2022. Comments received during the NOP's public review period, from May 17, 2022, to June 16, 2022, are in Appendix A. The NOP process is used to help determine the scope of the environmental issues to be addressed in the DEIR. Twelve agencies/interested parties responded to the NOP. This DEIR has taken those responses into consideration. Table 2-1, *NOP Comment Summary*, summarizes the issues identified by the commenting agencies, with reference to the section(s) of this DEIR where an issue is addressed.

Table 2-1 NOP Comment Summary

Commenting Agency/Person	Date	Comment Topic	Comment Summary	Issue Addressed In:
Native American Heritage Commission (NAHC)	05/19/22	Tribal Cultural Resources	• Recommends tribal consultation under Assembly Bill 52 (AB 52) and Senate Bill 18 (SB 18) pursuant to NAHC's recommendation for conducting cultural resources assessments. • Provides guidance and recommendations on how to conduct tribal consultation pursuant to AB52 and SB18	Section 5.18, *Tribal Cultural Resources*
Southern California Association of Governments (SCAG)	06/12/22	Land Use and Planning	• Requests review of the goals and policies of the project with the applicable policies of the Regional Transportation Plan/ Sustainable Communities Strategy (RTP/SCS).	Section 5.11, *Land Use and Planning*
California Geologic Survey (CGS)	06/13/22	Geology and Soils	• Provides recommendations for Liquification and Landslide Hazards in the City.	Section 5.7, *Geology and Soils*
Department of Transportation (DOT)	06/15/22	Transportation	• Provides recommendations to reduce Vehicle Miles Traveled (VMT)	Section 5.17, *Transportation*
California Department of Fish and Wildlife (CDFW)	06/16/22	Biological Resources	• Provides comments and recommendations on site-specific biological resources, such as sensitive habitat and open space sites, wildlife corridors and habitat connectivity, coastal California gnatcatcher, sensitive bird species, loss of bird and raptor nesting habitat, bats, lake and streambeds alteration (LSA) agreements, wetland resources, tree disease management plans, and landscaping. • Provides general comments and recommendations on biological baseline assessment, mitigation measures, biological direct, indirect and cumulative impacts, CESA, moving out of harm's way, translocation, compensatory mitigation, long-term management of mitigation lands, and project description and alternatives.	Chapter 3, *Project Description* Section 5.4, *Biological Resources* Chapter 7, *Alternatives*

Table 2-1 NOP Comment Summary

Commenting Agency/Person	Date	Comment Topic	Comment Summary	Issue Addressed In:
Ventura County Air Pollution Control District (APCD)	06/15/22	Air Quality GHG Emissions	• Requests the Air Quality assessment consider consistency with 2016 Air Quality Management Plan (AQMP). • Recommends utilizing the Ventura County Air Quality Assessment Guidelines (AQAG) to evaluate all potential air quality impacts • Provides recommended guidance documents that could be used to address impacts from climate change or GHG emissions. • Provides recommendations and guidance for environmental justice. • Provides guidance and recommends mitigation measures for crude oil and natural gas production and processing facilities. • Recommends policies for the General Plan.	Section 5.3, *Air Quality* Section 5.8, *GHG Emissions* Section 5.9, *Hazards and Hazardous Materials*
County of Ventura	06/16/22	Land Use Biological Resources GHG Emissions Energy Tribal Cultural Resources	• Recommends policies and goals for the Land Use Element of the General Plan. • Recommends goals and policies related to wildlife corridors for the general plan. • Recommends goals and policies related to climate change and energy storage for the general plan. • Recommends goals and policies related to interagency coordination for the general plan. • Recommends goals and policies related to tribal cultural resources for the general plan.	Section 5.11, *Land Use* Section 5.4, *Biological Resources* Section 5.8, *GHG Emissions* Section 5.6, *Energy* Section 5.18, *Tribal Cultural Resources*
Ventura County Public Works	06/16/22	Hydrology and Water Quality	• Requests Masterplan Hydrology Reports that address any impact(s) to jurisdictional channels in the City.	Section 5.10, *Hydrology and Water Quality*
Santa Ynez Band of Chumash Indians	06/23/22	Tribal Cultural Resources	• Requests no further consultation.	Section 5.18, *Tribal Cultural Resources*
Francis Lee	06/15/22	Transportation GHG Emissions Recreation Agriculture Resources Population and Housing Energy	• Requests introducing EV chargers, clean energy buses, walking paths, and protected bike lanes to promote air quality, reduce traffic congestion, provide recreational opportunities. • Requests use of native plants and native trees to add habitat, pollinators, and sequester carbon. • Requests ordinances for housing and businesses. • Requests wind and solar energy in the city.	Section 5.17, *Transportation* Section 5.8, *GHG Emissions* Section 5.16, *Recreation* Section 5.2, *Agriculture Resources* Section 5.14, *Population and Housing* Section 5.6, *Energy*

Table 2-1 NOP Comment Summary

Commenting Agency/Person	Date	Comment Topic	Comment Summary	Issue Addressed In:
Theresa Brady	06/22/22	Biological Resources	• Requests a survey of birds that are listed as endangered, rare, declining, or vulnerable in the city. • Recommends a wildlife crossing.	Section 5.4, *Biological Resources*
Shannon Praetorius	06/08/22	Biological Resources Hazards and Hazardous Materials Hydrology and Water Quality Utilities	• Provides comments to the Hitch Ranch EIR on: • Protecting rare species • Loss and removal of trees • Pollution from the Santa Susana Field Lab • Water supply, wastewater, and drought	Section 5.4, *Biological Resources* Section 5.9, *Hazards and Hazardous Materials* Section 5.10, *Hydrology and Water Quality* Section 5.19, *Utilities*

Prior to preparation of the DEIR, the City of Moorpark hosted a public scoping meeting on May 31, 2022, at the Moorpark City Council Chambers to determine the concerns of responsible and trustee agencies and the community regarding the proposed project. The scoping meeting identified concerns related to:

- Traffic congestion and widening of roadways (see Section 5.17, *Transportation*)
- Downtown mixed uses (see Section 5.11, *Land Use*)
- Traffic-related air-quality impacts (see Section 5.3, *Air Quality*)
- Railroad traffic and safety (see Section 5.17, *Transportation*)
- Protection of ridgelines (see Section 5.1, *Aesthetics*)
- Noise and lights from traffic (see Sections 5.1, *Aesthetics,* 5.13, *Noise, and* 5.17, *Transportation*)
- Continuity of neighborhoods from high to low density (see Section 5.11, *Land Use*)
- Wildfire hazards, evacuation routes, and critical facilities (see Sections 5.17, *Transportation*, and 5.20, *Wildfire*)

2.3 SCOPE OF THIS DEIR

The scope of the DEIR was determined based on the CEQA Guidelines Appendix G CEQA Checklist, comments received in response to the NOP, and comments received at the public scoping meeting conducted by the City. Pursuant to Sections 15126.2 and 15126.4 of the CEQA Guidelines, the DEIR should identify any potentially significant adverse impacts and recommend mitigation that would reduce or eliminate these impacts to levels of less than significant.

This DEIR evaluates potentially significant impacts associated with implementation of the Moorpark General Plan 2050. The information in Chapter 3, *Project Description*, establishes the basis for analyzing future project-related environmental impacts. The Moorpark General Plan 2050 goals and policies, existing regulations, and mitigation measures have been identified that either reduce or eliminate potentially significant impacts. The focus of the impact analysis is on areas that propose physical changes that may result in environmental impacts (e.g., areas where land use changes are proposed) and on ensuring that development and improvement activities are consistent with the Moorpark General Plan 2050. In addition, the DEIR describes a range of reasonable alternatives to the project that could feasibly attain the basic objectives of the project and substantially avoid or lessen any of the significant impacts of the proposed project, and evaluates the comparative merits of these alternatives and the proposed project.

2.3.1 Impacts Considered Less Than Significant

The EIR identified the following impacts as less than significant or no impact in the DEIR.

- Aesthetics
- Energy
- Hydrology and Water Quality
- Land Use and Planning
- Mineral Resources
- Population and Housing
- Public Services
- Recreation
- Transportation
- Utilities and Service Systems

2.3.2 Potentially Significant Adverse Impacts

The City of Moorpark determined that two environmental factors have potentially significant impacts if the proposed project is implemented.

- Geology and Soils
- Tribal Cultural Resources

2.3.3 Unavoidable Significant Adverse Impacts

This DEIR identifies eight significant and unavoidable adverse impacts, as defined by CEQA, that would result from implementation of the proposed project. Unavoidable adverse impacts may be considered significant on a project-specific basis, cumulatively significant, and/or potentially significant. The City must prepare a "statement of overriding considerations" before it can approve the project, attesting that the decision-making body has balanced the benefits of the proposed project against its unavoidable significant environmental effects and has determined that the benefits outweigh the adverse effects, and therefore the

adverse effects are considered acceptable. The impacts that were found in the DEIR to be significant and unavoidable are:

- Agriculture and Forestry Resources
- Air Quality
- Biological Resources
- Cultural Resources (Historic Resources)
- GHG Emissions
- Hazards and Hazardous Materials (Wildfire)
- Noise
- Wildfire

2.4 INCORPORATION BY REFERENCE

All documents cited or referenced are incorporated into the DEIR in accordance with CEQA Guidelines Sections 15148 and 15150, including but not limited to:

- City of Moorpark Municipal Code

- City of Moorpark Existing Conditions Report (available at city hall address, below or online at https://moorparkgeneralplan.com/)

In each instance where a document is incorporated by reference for purposes of this report, the DEIR will briefly summarize the incorporated document or briefly summarize the incorporated data if the document cannot be summarized. In addition, the DEIR will explain the relationship between the incorporated part of the referenced document and the DEIR.

This DEIR also relies on previously adopted regional and statewide plans and programs, agency standards, and background studies in its analyses, such as the Ventura County Air Pollution Control District's air quality management plan. Chapter 13, *Bibliography*, provides a complete list of references utilized in preparing this DEIR. All of the documents incorporated by reference that are not published are available for review at:

- Moorpark City Hall: 799 Moorpark Ave., Moorpark, CA 93021.

2.5 FINAL EIR CERTIFICATION

This DEIR is being circulated for public review for 45 days. Interested agencies and members of the public are invited to provide written comments on the DEIR to the City address shown on the title page of this document. Upon completion of the 45-day review period, the City of Moorpark will review all written comments received and prepare written responses for each. A Final EIR (FEIR) will incorporate the received comments, responses to the comments, and any changes to the DEIR that result from comments. The FEIR will be presented to the City of Moorpark for potential certification as the environmental document for the

project. All persons who comment on the DEIR will be notified of the availability of the FEIR and the date of the public hearing before the City.

The DEIR is available to be viewed electronically at https://moorparkca.gov/568/Environmental-Documents or is available to the general public for review at various locations:

- Moorpark City Hall: 799 Moorpark Ave., Moorpark, CA 93021
- Moorpark City Library: 699 Moorpark Ave., Moorpark, CA 93021

2.6 MITIGATION MONITORING

Public Resources Code Section 21081.6 requires that agencies adopt a monitoring or reporting program for any project for which it has made findings pursuant to Public Resources Code Section 21081 or adopted a Negative Declaration pursuant to 21080(c). Such a program is intended to ensure the implementation of all mitigation measures adopted through the preparation of an EIR or Negative Declaration.

The Mitigation Monitoring Program for the Moorpark General Plan 2050 will be completed as part of the Final EIR, prior to consideration of the project by the Moorpark City Council.

2. Introduction

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3. Project Description

3.1 PROJECT LOCATION

The City of Moorpark is in eastern Ventura County in the Transverse Ranges of Southern California, as shown in Figure 3-1*, Regional Context*, and Figure 3-2, *Citywide Aerial*. It is generally bounded by the City of Simi Valley to the east, the Tierra Rejada Valley and City of Thousand Oaks to the south, and unincorporated Ventura County to the west and north.

Lands west of the city are largely agricultural and protected from development by Save Open Space and Agricultural Resources (SOAR), voter-approved initiatives requiring the public's vote before any agricultural or open space lands are rezoned for development. The city's northerly boundary is largely mountainous. Its sphere of influence, as designated by the Ventura Local Area Formation Commission, is coterminous with its jurisdictional boundaries. Regional access to Moorpark is provided by the Ronald Reagan Freeway (SR-118) and State Route 23 (SR-23), and rail service to the Los Angeles basin and destinations to the north is provided by MetroLink and Amtrak from the station on High Street.

3.2 EXISTING LAND USE SUMMARY

The City of Moorpark encompasses 7,992 acres. Table 3-1, *Existing Land Use Summary,* and Figure 3-3, *Existing Land Use*, shows the distribution of existing land uses and the number of housing units, households, population, nonresidential square footage, and jobs in Moorpark. Existing conditions in Table 3-1 reflect the built environment as of 2022 using data provided by the City and County Assessor's office, employment statistics based on US Census Bureau data, and population estimates derived from data provided by the California Department of Finance.

Table 3-1 Existing Land Use Summary

Category	Number of Housing Units[1]	Total Population[2]	Nonresidential Square Feet[3, 4]	Employment (Number of Jobs)[5]
Rural Residential	54	171	0	0
Single Family Residential	8,574	27,085	0	0
Mobile Home	253	799	0	0
Multi-Family Residential	2,640	8,340	0	0
Open Space and Recreation[6]	0	0	124,126	0
Agriculture	0	0	0	866
Commercial Services	4	13	1,752,318	2,366
Industrial	1	3	4,277,295	6,941
General Office	1	3	723,787	1,037
Public Facilities	4	13	468,244	89
Education	0	0	1,314,684	1,610
Transportation, Communication, Utilities	0	0	95,609	6
Right-of-Way	0	0	0	0
Water/Floodway	0	0	0	0
Vacant[7]	6	19	27,108	0
Total	**11,537**	**36,445**	**8,783,171**	**12,915**

Notes: Totals may not add to 100 percent due to rounding.
1 Dwelling unit counts are based on parcel-level data supplied by the City.
2 Population in Moorpark is based on statistics compiled by the California Department of Finance (DOF 2021). Population is calculated by multiplying households by a persons per household rate of 3.23, a blended rate which accounts for the city's mix of single and multiunit housing.
3 Nonresidential square footage (sf) is based on a GIS area calculation of building footprints.
4 For multistory buildings, square footage is taken by multiplying building footprints by the number of stories as determined by field observation.
5 Employment in Moorpark is based on U.S. Census Bureau (2022).
6 Parks employees are accounted for elsewhere in this table by the land use category of their primary work address.
7 The existing land use dataset is based on Southern California Association of Governments (SCAG) data, which may have some discrepancy with the City's parcel data; hence there are existing land uses under vacant land.

3.3 CURRENT MOORPARK GENERAL PLAN

Figure 3-4, *Current Land Use Plan*, shows the existing land use designations in Moorpark. Table 3-2, *Current Moorpark General Plan Land Use Summary*, presents a breakdown of the land use buildout in the city under the current General Plan.

Table 3-2 Current Moorpark General Plan Land Use Summary

Category	Number of Housing Units	Total Population[1]	Nonresidential Square Feet	Employment (Number of Jobs)
Residential				
Rural Low (RL)	212	668	0	0
Rural High (RH)	202	639	0	0
Low (L)	203	643	0	0
Medium Low (ML)	1,881	5,941	0	0
Medium (M)	4,551	14,376	0	0
High (H)	1,171	3,699	0	0
Very High (VH)	2,964	9,364	0	0
Accessory Dwelling Units (ADUs)	480	1,516	0	0
Industrial				
Industrial 1 (I-1)	3	9	3,566,216	5,920
Industrial 2 (I-2)	0	0	2,569,435	3,681
Commercial				
Commercial 1 (C-1)	0	0	47,662	64
Commercial 2 (C-2)	97	306	1,184,895	1,599
Specific Plan				
Downtown Specific Plan (SP-D)	403	1,274	780,377	1,053
Hitch Ranch Specific Plan (SP1)	755	2,385	0	0
Moorpark Highlands Specific Plan (SP2)	685	2,164	0	0
Specific Plan 9 (SP9)	100	316	0	0
Carlsberg Specific Plan (SP 92-1)	554	1,751	1,387,495	1,872
Other				
Open Space 1 (OS-1)	5	15	0	19
Open Space 2 (OS-2)	1	3	0	137
Agricultural (AG)	2	6	0	866
Public (PUB)	78	246	128,729	89
Utilities (U)	3	9	39,971	6
Park (P)[2]	1	3	37,344	0
School (S)	0	0	1,314,684	1,610
Total	**14,351**	**45,335**	**11,056,808**	**16,917**

Notes: Totals may not add to 100 percent due to rounding. Includes the remaining undeveloped capacity of the current Moorpark General Plan's land use designations, including approved Specific Plans, Accessory Dwelling Units (ADUs) as allowed by state legislation, and pending and approved projects. In instances where existing uses exceed the densities/intensities permitted by the current General Plan's land use designations, the current General Plan accounts for these areas in accordance with their existing uses.

1 Population is calculated by multiplying households by a persons per household rate of 3.23, a blended rate which accounts for the City's mix of single- and multiunit housing.

2 Parks employees are accounted for elsewhere in this table by the land use category of their primary work address.

3.4 STATEMENT OF OBJECTIVES

The City of Moorpark's 2050 General Plan Update (proposed project) is a comprehensive effort by the City to update the existing General Plan for the next 30 years through 2050. The updated General Plan will bring all elements (chapters) into compliance with state housing mandates; conform with new state laws related to

community health, environmental justice, climate adaption, resiliency, and mobility; and bring long-term growth and fiscal projections into alignment with current economic conditions. Moorpark's vision statement guides land use decisions in the city:

> Moorpark in 2050 is a virtually and physically connected community that provides a sustainable, diverse, inclusive, equitable and safe place to live, work, and play for all generations. Moorpark supports and values local businesses, arts and education, innovation, healthy living, and maintains its family-oriented small-town feel. We are stewards of the environment and honor our agricultural and cultural heritage. We balance these values to maintain a high quality of life for our residents.

Objectives for the Moorpark General Plan 2050 will aid decision makers in their review of the project and associated environmental impacts.

1. Sustainable growth through well-planned development that provides for the needs of Moorpark's residents and businesses, makes efficient use of land and infrastructure, protects important environmental resources, promotes the health of the community, and maintains the unique character distinguishing the city as a special place in the region.

2. A city of distinct, compact, and walkable centers and corridors, surrounded by diverse and complete neighborhoods, and connected to a unifying network of greenways and open spaces.

3. Fair and equitable access for all residents to employment, housing, parks, education, recreation, transportation, retail, and public services, including participation in governmental decision-making.

4. Well-designed housing that is diverse in product type, occupancy, location, affordability, and tenure and that meets the existing and future needs of residents.

5. Vital, active, prosperous, and well-designed commercial centers and corridors that offer a diversity of goods, services, and entertainment and contribute a positive experience for Moorpark's residents and visitors.

6. A diversity of well-designed districts and corridors containing an integrated mix of commercial, office, and/or housing that enable Moorpark's residents to live close to businesses and employment, reduce automobile use, and actively engage and enhance pedestrian activity.

7. A transportation system supporting uses accommodated by the Land Use Plan and providing for the safe and efficient movement of people of all ages and abilities, goods, and services into, out of, and through the City of Moorpark.

8. A citywide system of safe, efficient, and attractive bicycle, pedestrian, and multiuse trail routes for commuter, school, and recreational use.

9. Transportation systems and utility infrastructure that support Moorpark's neighborhoods and business districts, are efficient, and employ best practices for environmental sustainability and carbon reduction.

Figure 3-1
Regional Context

City of Moorpark
Surrounding Cities
County Boundary

MADE BY MOORPARK General Plan 2050

Draft Environmental Impact Report

0 1.5 3 6 Miles

Source: The City of Moorpark 2022 Date: 10/27/2022

3. Project Description

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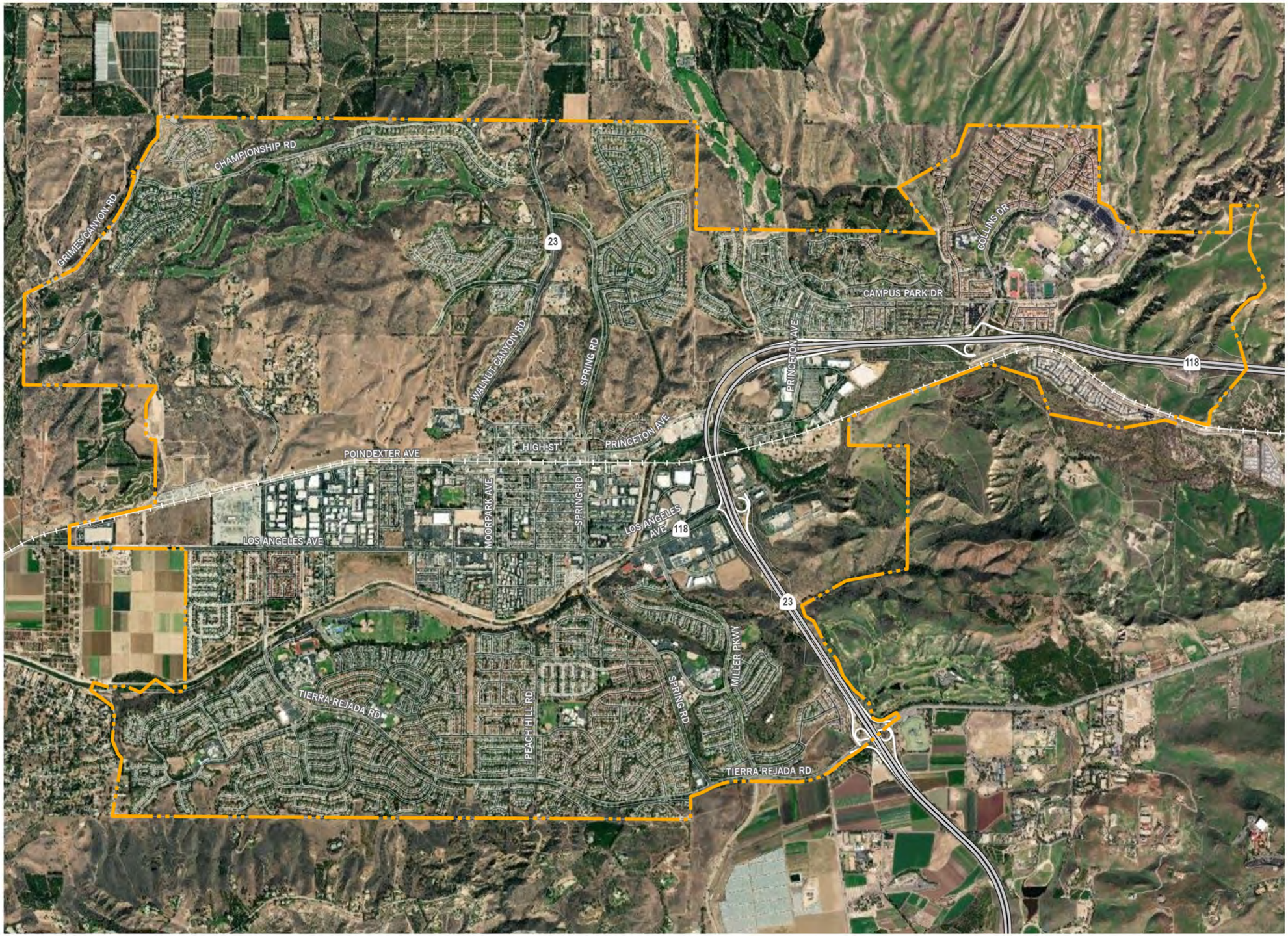
Figure 3-2

Citywide Aerial



MADE BY MOORPARK General Plan 2050

Draft Environmental Impact Report

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Source: The City of Moorpark 2022 Date: 10/27/2022

3. Project Description

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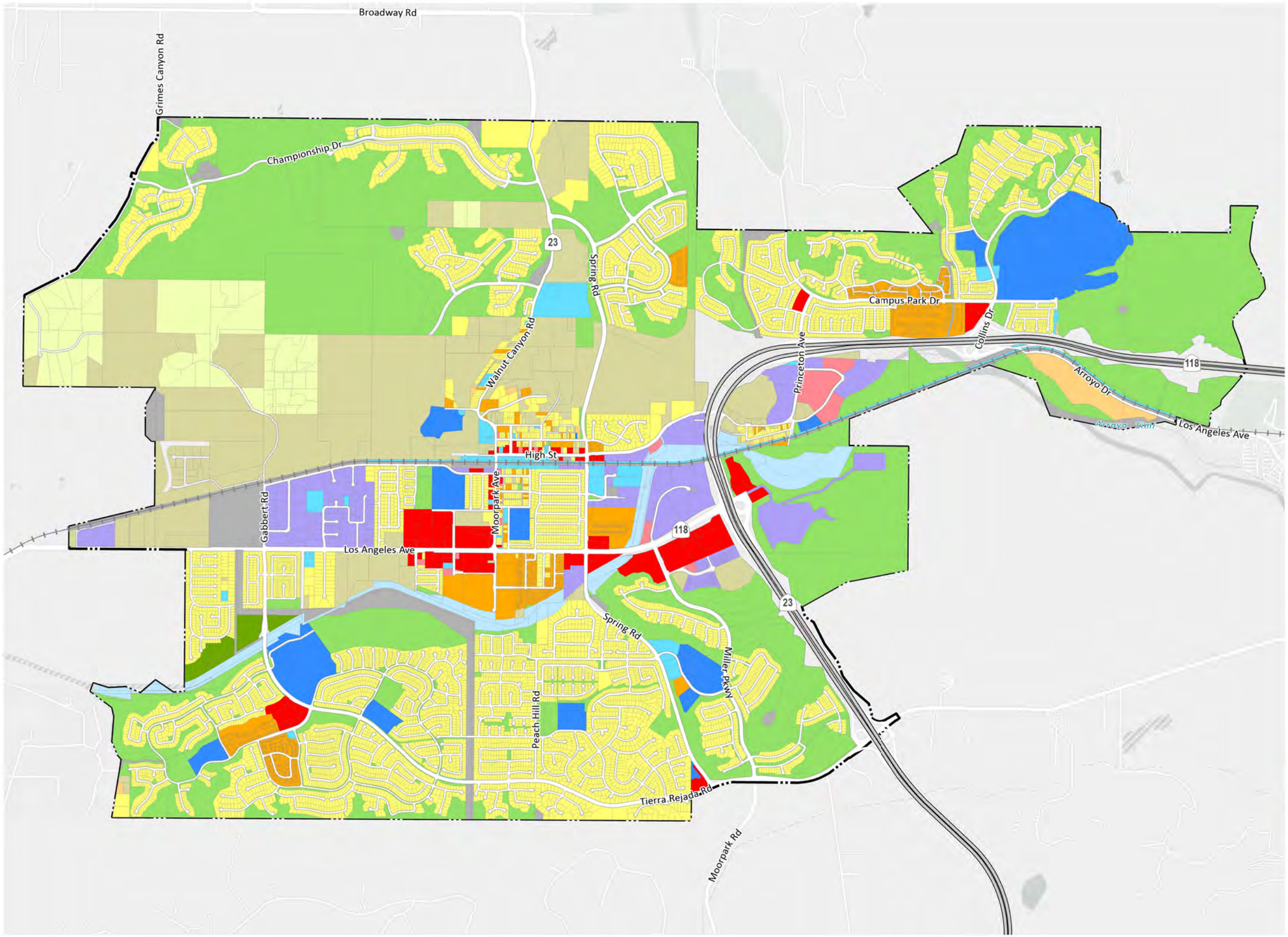
Figure 3-3

Existing Land Use



City Boundary
Railroad

Existing Land Use
- Agriculture
- Rural Residential
- Single Family Residential
- Multi-family Residential
- Mobile Home
- Commercial Services
- General Office
- Industrial
- Education
- Public Facilities
- Transportation, Communication, Utilities
- Open Space and Recreation
- Vacant
- Water/Floodway
- Right of Way

MADE BY MOORPARK General Plan 2050

Draft Environmental Impact Report

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Source: The City of Moorpark 2022 Date: 10/27/2022

3. Project Description

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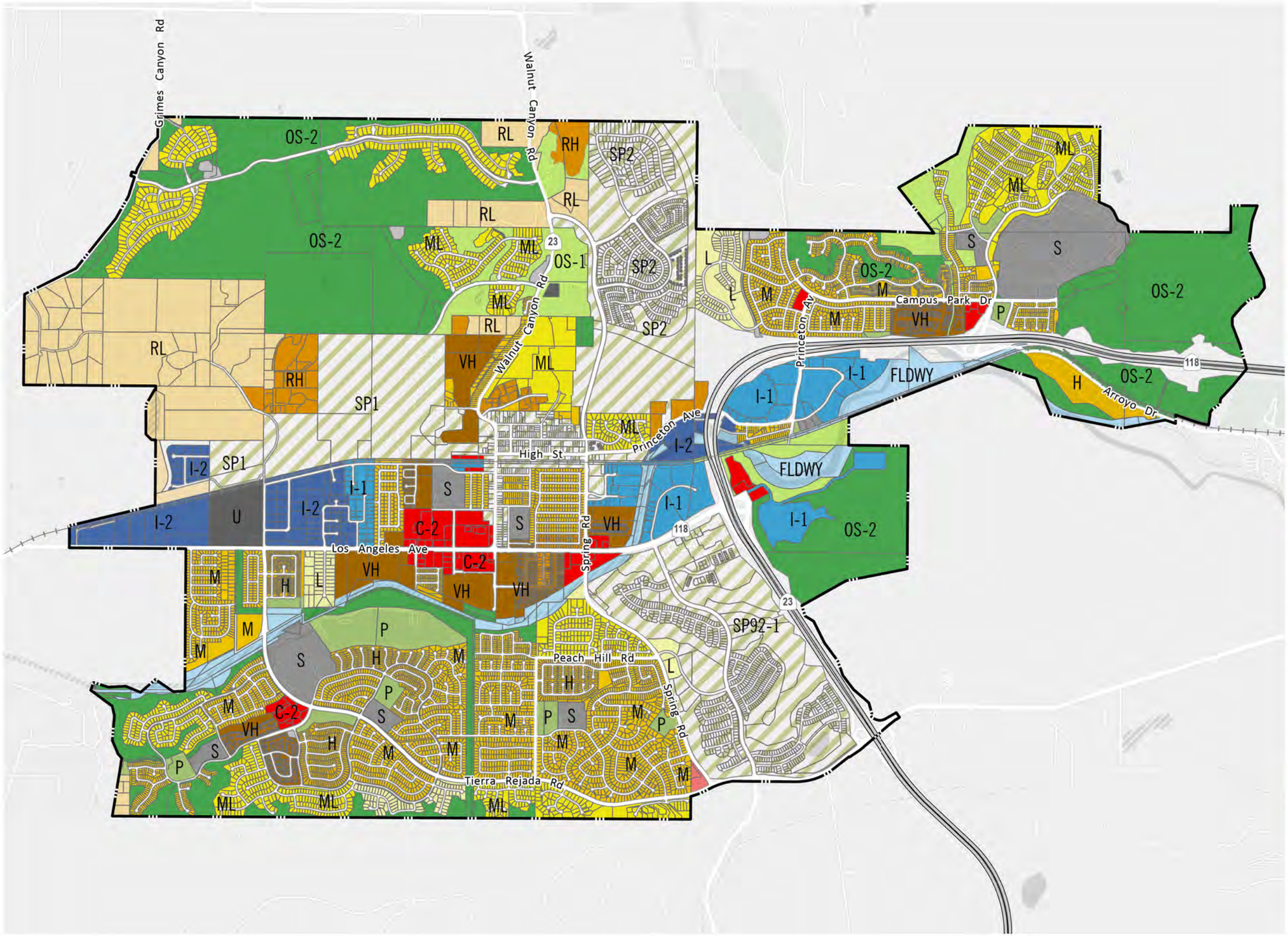
Figure 3-4
Current General Plan



City Boundary
Railroad

Current General Plan Land Use

- AG-1, Agriculture
- RL, Rural Low Density Residential (1 du/5 ac)
- RH, Rural High Density Residential (1 du/1 ac)
- L, Low Density Residential
- ML, Medium Low Density Residential
- M, Medium Density Residential
- H, High Density Residential
- VH, Very High Density Residential
- OS-1, Open Space 1 (1 du/10-40 ac)
- OS-2, Open Space 2 (1 du/40 ac)
- P, Park
- S, School
- PUB, Public/Institutional
- U, Utilities
- FLDWY, Floodway
- C-1, Neighborhood Commercial
- C-2, General Commercial
- I-1, Light Industrial
- I-2, Medium Industrial
- SP1, SP2, SP9, or SP92-1
- SP-D, Downtown Specific Plan
- ROW, Freeway or Right of Way

MADE BY MOORPARK General Plan 2050

Draft Environmental Impact Report

0 1,000 2,000 4,000 FT

Source: The City of Moorpark 2022 Date: 10/27/2022

3. Project Description

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10. A self-sustaining, innovative, and resilient local economy that provides goods and services desired by local residents, promotes growth in living-wage jobs and access to lifelong learning, attracts regional consumer spending, and contributes to Moorpark's premier quality of life.

11. Protection of scenic topographic features and elements that contribute to Moorpark's unique aesthetic and visual qualities and promote the quality of life that Moorpark citizens pursue.

12. Sensitive natural and biological resources are protected from detrimental impacts of new development and enhanced and restored where possible.

13. Moorpark's unique historical, cultural, archaeological, and paleontological resources are preserved and protected.

14. Easy access to parks and recreational facilities, healthy foods, health facilities, and arts and cultural events enriches Moorpark's physical and mental health.

15. A city that improves the ability of individuals, communities, economic systems, and the natural and built environments to withstand, recover from, and adapt to changes from natural hazards, human-made disasters, climate change, and economic shifts.

3.5 PROJECT CHARACTERISTICS

"Project," as defined by the CEQA Guidelines, means:

> ... the whole of an action, which has a potential for resulting in either a direct physical change in the environment, or a reasonably foreseeable indirect physical change in the environment, and that is any of the following: (1)…enactment and amendment of zoning ordinances, and the adoption and amendment of local General Plans or elements thereof pursuant to Government Code Sections 65100–65700. (14 Cal. Code of Reg. Section 15378[a])

3.5.1 Description of the Project

The proposed project is an update of the City of Moorpark's General Plan. The General Plan is a State-required legal document that provides guidance to decision-makers regarding the allocation of resources and determining the future physical form and character of development in the city. It is the official statement of the City regarding the extent and types of development needed to achieve the community's physical, economic, social, and environmental goals. Although the General Plan is composed of individual sections, or "elements," that individually address a specific area of concern, the General Plan embodies a comprehensive and integrated planning approach for the jurisdiction.

Under State law, each city and county general plan contains eight mandated elements: land use, circulation, housing, conservation, open space, noise and safety, and environmental justice. These elements can be formatted in any manner within a general plan and do not need to be "stand-alone" chapters. Government Code Section 65303 also permits local jurisdictions to formulate other elements, which, in the "judgment of the planning agency," relate to the physical development of the city. Once adopted, these "permissive" elements

are as legally binding as a mandatory element. The City of Moorpark has directed the inclusion of an additional permissive elements in its General Plan, as described later in this chapter.

3.5.1.1 PROPOSED GENERAL PLAN

The proposed General Plan is a comprehensive update of the current General Plan. The update includes the following elements that address all the required topics in state law:

- The **Land Use Element** establishes how land is developed, used, and arranged to ensure compatibility and add value to the community in terms of function, design, and fiscal return.
- The **Circulation Element** coordinates the circulation system with future land use patterns and buildout to satisfy local and subregional mobility needs, as well as access and connectivity between various neighborhoods and districts. This element also defines goals and policies for the provision of public infrastructure to support the uses accommodated by the Land Use Element.
- The **Housing Element** ensures greater production, preservation, and improvement of housing in the community in the context of existing and future housing needs, constraints to the production of housing, and available land and financial resources.
- The **Economic Development Element** articulates the City's approach to developing and maintaining the local economy, retaining, and attracting further investments, and connecting economic development with the City's long-term fiscal health.
- The **Open Space, Parks, and Recreation Element** establishes direction for the City's park system and recreation programs, emphasizing the vital role parks and recreation programs play in economic development, land use, housing, community health, infrastructure, and transportation goals.
- The **Conservation Element** addresses how resources are managed comprehensively using systems that are environmentally and economically sustainable and meet growth demand in Moorpark.
- The **Safety Element** addresses how the City protects life, property, and commerce from impacts associated with human-made and natural hazards, disasters, and other threats to public safety. It also identifies ways the City can establish strategies to adapt to increased hazard risks and strategies to become more resilient.
- The **Noise Element** provides a basis for comprehensive local programs to control and abate environmental noise and to protect residents from excessive exposure.

In addition to these elements, the General Plan also includes an **Implementation Plan** that identifies responsible parties and the actions needed to carry out General Plan policies.

3.5.1.2 LAND USE DESIGNATIONS

Table 3-3, *Proposed Land Use Designations*, show the proposed land use designations that would regulate development in the city.

Table 3-3 Proposed Land Use Designations in the City

General Plan Land Use Designations	Residential Density and Non-residential Intensity	Description
Residential		
Rural (R)	1 du/acre	This designation allows development of residential estate lots on minimum one-acre lots or by using clustering techniques for areas with significant site constraints, (rugged topography, steep slopes, lack of services, limited access, etc.) or areas of important visual and natural resources.
Neighborhood Very Low / Estate (NVL)	3 du/acre	Housing developed on minimum 1/3-acre lots, which may include estate-type units in planned residential subdivisions with extensive trail systems and open spaces, and on the edges of the city.
Neighborhood Low (NL)	8 du/acre	This designation includes single-family neighborhoods at a variety of densities. The purposes are to (a) protect existing single-family areas and provide for infill development within these areas at a similar scale as the surrounding residential context; and (b) provide for the development of new single-family subdivisions on large vacant properties comparable in scale with existing single-family neighborhoods.
Neighborhood Medium (NM)	24 du/acre	This designation includes a mix of lower-scaled attached multifamily homes, referred to as “missing middle” housing types, often close to existing or proposed retail and commercial areas.
Neighborhood High (NH)	32 du/acre	This designation includes a mix of attached multifamily housing types within walking distance of retail, services, and major centers of activity and transit stations.
Neighborhood Mixed Density (NMX)	8 du/acre	This designation provides for a mix of housing types (such as single family detached, duplex and multiplex, courtyard housing, and townhomes) within a large planned development area, with recreational amenities, community meeting rooms, and/or small neighborhood-serving retail, and extensive open spaces and trail systems.
Commercial		
Neighborhood Commercial	0.35 FAR	This designation applies to small parcels, typically one to five acres in size, providing convenience-type retail, neighborhood offices, and service activities in one-story buildings designed to serve the immediate neighborhood and accessible by car or bicycle and on foot.
Commercial Center – Auto (C-A)	0.5 FAR	This designation provides for commercial areas with a wide range of retail and service activities (generally larger than five acres). Intended uses include community shopping centers, department stores, furniture and appliance stores, restaurants, automotive uses, office and professional services, and business support services. This designation encourages the grouping of commercial outlets into consolidated centers with direct access to major roads, arterials, and/or freeways.
Mixed-Use		
Mixed Use Low (MUL)[1]	1.5	This designation provides for neighborhood-serving goods and services and multifamily residential in a mixed-use format (vertical or horizontal). Buildings in this designation will be designed to be walkable with wide sidewalks, active frontages, and minimal setbacks from the back of the sidewalk.
Mixed Use Medium (MUM)	2.0 FAR	This designation provides for a mix of commercial, office, and housing development in buildings with an additional story in height to achieve project feasibility. Buildings will contain active ground-floor uses located at or near the sidewalk with housing or office next to or above.

3. Project Description

Table 3-3 Proposed Land Use Designations in the City

General Plan Land Use Designations	Residential Density and Non-residential Intensity	Description
Mixed Use District (MUD)	2.0 FAR	This designation applies to larger sized properties developed with a mix of uses that may include buildings developed for a single use (such as retail, office, restaurant, and housing) and/or structures that integrate multiple uses vertically (such as housing above ground-level retail). Typically, such projects establish a compact, walkable, "village-like" environment where buildings are grouped along external and internal street frontages and pedestrian-oriented pathways, plazas, and open spaces, with parking in structures or subterranean. A model for the redevelopment of underutilized commercial centers.
Industrial		
Industrial Park (IP)	1.0 FAR	This designation applies to properties developed with multiple industrial (light manufacturing), research and development, offices, and other buildings containing one or more tenant and limited support uses, with surface parking lots. Some areas developed with landscapes and streetscapes to convey a "campus-like" environment. Truck access to individual businesses normally required.
Industrial Flex (IF)	1.0 FAR	This designation applies to properties developed predominantly with uses permitted by "Industrial Park" category, allowing the integration of ancillary and a diversity of specialty commercial uses, such as restaurants, brew pubs, copy houses, overnight accommodations, and similar uses that activate the area in the evening and on weekends. Truck routes and hours of operation are limited to prevent conflicts with customers.
Other		
Agriculture (AG)	0.1 – 0.025 FAR	This designation applies to land used for growing and harvesting crops and raising livestock.
Open Space (OS)	0.1 – 0.025 FAR	This designation identifies open space lands that have various development constraints, such as slope gradient, soil and geotechnical hazards, plus other environmental concerns, access, and availability of public services. This designation identifies permanent open space areas that function to preserve visual resources and natural areas, buffer communities, provide relief from noise and crowding of urban development, maintain environmentally hazardous areas, etc. A mineral resource production overlay designation is provided for significant mineral resource deposits as identified by the California Department of Conservation, Division of Mines and Geology.
Neighborhood / Community Park (NCP)	NA	This designation applies to properties developed for active and passive recreational activity serving a neighborhood or the larger community. Natural open areas may be preserved and integrated into the park. Ideally, a park is located within a quarter mile of every residence.
School (S)	NA	Public school sites of all levels, elementary through high school, as well as the Moorpark College facility are all identified by this classification.
Utilities (U)	NA	This designation identifies major public utility facilities.
Public / Institutional (PUB)	NA	This designation identifies public facilities, including government buildings, libraries, fire stations, nonprofit organization buildings, and community service centers, but excludes jail facilities.
Floodway (FLDWY)	NA	This designation identifies the floodway of the Arroyo Simi as identified by the Federal Emergency Management Agency (FEMA). Habitable structures are prohibited.
Freeway Right-of-Way (FRWY-R/W)	NA	This designation identifies street, freeway, and railroad rights-of-way in the city.

Table 3-3 Proposed Land Use Designations in the City

General Plan Land Use Designations	Residential Density and Non-residential Intensity	Description
Specific Plans		
Hitch Specific Plan (SP-1)	NA	The proposed Hitch Ranch Specific Plan encompasses a 270.64-acre site in the rolling hills north of Poindexter Avenue and west of Moorpark Avenue. The Specific Plan intends to construct a primarily residential development with associated park facilities, private recreational facilities, open spaces, and equestrian trails.
Moorpark Highlands Specific Plan II (SP-2)	NA	The Moorpark Highlands Specific Plan II, adopted June 1999, covers a 445-acre site in the northern section of Moorpark. It guides the phased development of a new residential neighborhood with supporting parks and schools balanced by the preservation of surrounding open spaces. The plan is nearing buildout, with a few residential parcels remaining to be developed.
Carlsberg Specific Plan (SP92-1)	NA	The Carlsberg Specific Plan, adopted October 30, 1990, and subsequently amended on September 7, 1994, covers a 500-acre site in the southeastern area of Moorpark. The Specific Plan, which has been substantially implemented, includes a mix of uses, including residential (154 acres), subregional retail/commercial/business park (40 acres), open space (220.4 acres), nature preserve (9 acres), park space (6.5 acres) and institutional (7 acres). The remaining development activity is centered on vacant sites at the Patriot Commerce Center. The GPAC members have recommended Industrial Flex uses for these vacant parcels.
Downtown Specific Plan (SP-D)	NA	The Downtown Specific Plan, adopted October 7, 1998, and most recently amended July 15, 2020, encompasses the Moorpark Downtown Area and Old Moorpark along and surrounding Moorpark Avenue and High Street. The plan envisions transforming Downtown Moorpark into a vibrant commercial and residential destination in the heart of the city. The Downtown Specific Plan furthers the vision for the overall revitalization of the downtown and implements design standards, guidelines, and a strategy for business attraction and development of the City-owned parcels in the downtown area. The GPAC members have recommended that the Specific Plan be amended to allow for uses conforming to the Mixed-Use Medium designation along High Street and for uses conforming to the Mixed-Use Low designation along Moorpark Avenue.

Notes: NA = Not Applicable; du/acre = dwelling units per acre; FAR = floor area ratio.
[1] Mixed Use Low (MUL) occurs within the Specific Plan designations.

3.5.1.3 LAND USE PLAN

Figure 3-5, *Proposed Land Use Plan,* shows the proposed General Plan Land Use Map. Table 3-4, *Proposed Land Use Summary*, details the projected population, employment, dwelling units, and nonresidential square footage of development planned for under the Moorpark General Plan 2050, and compares these buildout projects up to Year 2050 to existing conditions. Assumptions used to calculate buildout can be found in Appendix B, *Buildout Methodology Memorandum*, of this DEIR.

3. Project Description

Table 3-4 Proposed Land Use Summary

Category	Number of Housing Units	Total Population[1]	Nonresidential Square Feet	Employment (Number of Jobs)
Residential				
Rural (R)	382	1,207	0	0
Neighborhood Very Low / Estate (NVL)	2,624	8,289	0	0
Neighborhood Low (NL)	4,532	14,316	0	0
Neighborhood Mixed Density (NMX)	568	1,795	0	0
Neighborhood Medium (NM)	1,220	3,853	0	0
Neighborhood High (NH)	3,143	9,928	0	0
Accessory Dwelling Units (ADUs)	480	1,516	0	0
Mixed Use				
Mixed Use District (MUD)	1,088	3,438	675,267	911
Mixed Use Medium (MUM)	100	316	796	1
Industrial				
Industrial Flex (IF)	0	0	1,153,815	2,464
Industrial Park (IP)	3	9	6,797,695	9,739
Commercial				
Neighborhood Commercial (NC)	0	0	173,532	234
Commercial Center – Auto (C-A)	0	0	606,377	818
Specific Plan				
Hitch Ranch Specific Plan (SP1)	755	2,385	6,398	9
Moorpark Highland Specific Plan (SP2)	548	1,730	0	0
Carlsberg Specific Plan (SP92-1)	554	1,751	1,387,495	1,872
Downtown Specific Plan (SP-D)[2]	961	3,037	1,092,991	1,475
Other				
School (S)	0	0	1,314,684	1,610
Public / Institutional (PUB)[3]	1	3	113,487	89
Utilities (U)	0	0	39,971	6
Neighborhood / Community Park (NCP)[4]	1	3	39,966	0
Open Space (OS)	64	204	164,609	153
Agricultural (AG)	0	0	0	866
Total	**17,025**	**53,781**	**13,567,083**	**20,249**

Notes: Totals may not add to 100 percent due to rounding. Factors used to calculate buildout can be found in Appendix B, *Buildout Methodology Memorandum*, in Table 8, *Factors for Proposed Land Use Categories*; Table 9, *Employment Generation Rates*; and Table 10, *Opportunity Site Factors*.

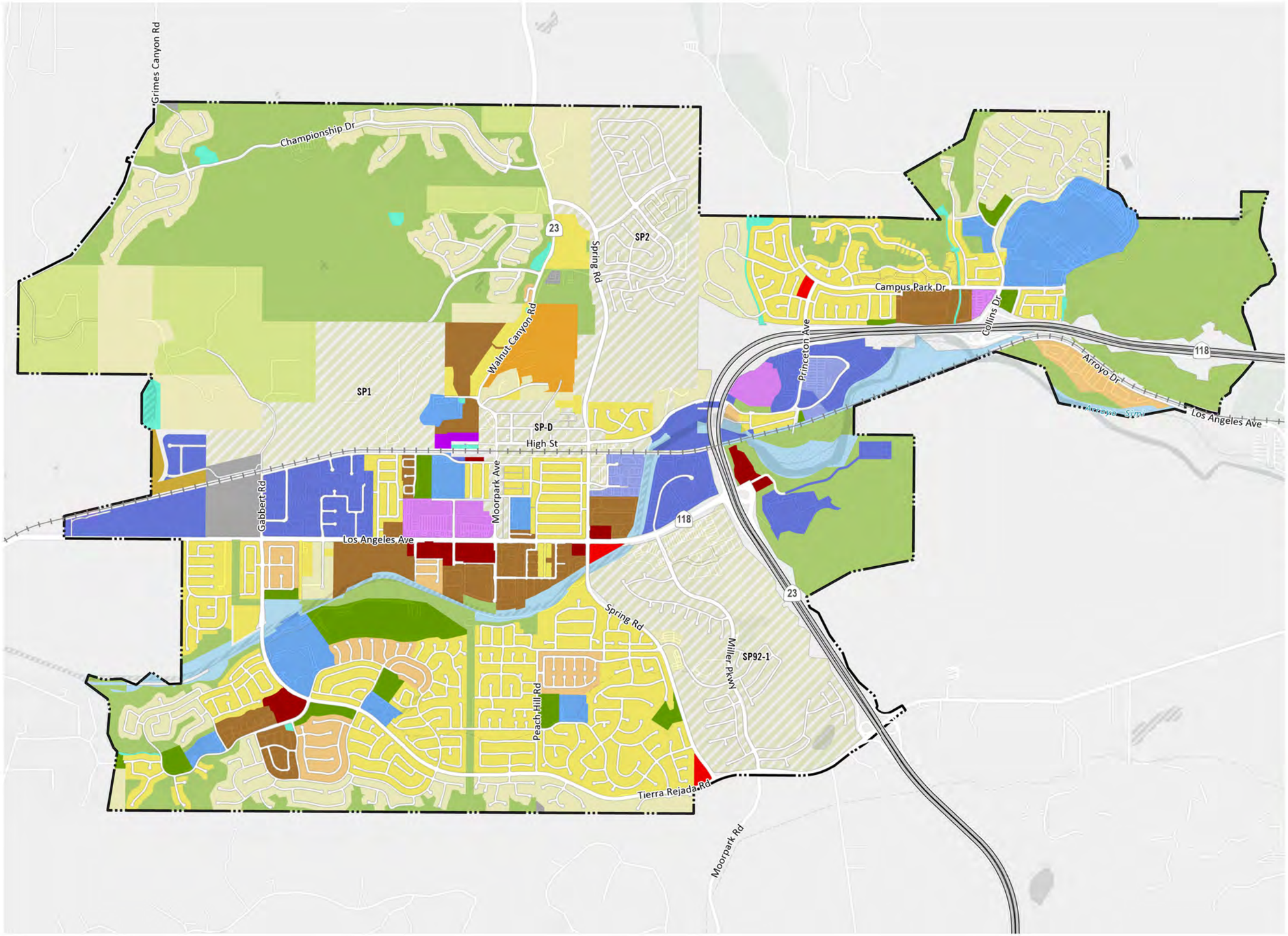
1 Population is calculated by multiplying households by a persons per household rate of 3.23, a blended rate which accounts for the city's mix of single- and multiunit housing.

2 SP-D here includes Opportunity Sites 1, 2, and a portion of 6.

3 The Oakmont Senior Living project is on parcels designated PUB under the current General Plan but has a residential use under the proposed project. This accounts for the reduction in PUB square footage between the proposed project and the current General Plan.

4 Parks employees are accounted for elsewhere in this table by the land use category of their primary work address.

Figure 3-5
Proposed Land Use Plan



City Boundary
Railroad

Proposed General Plan

- AG - Agriculture
- R - Rural
- NVL Neighborhood Very Low
- NL - Neighborhood Low
- NM - Neighborhood Medium
- NMX - Neighborhood Mixed Density
- NH - Neighborhood High
- MUD - Mixed Use District
- MUM - Mixed Use Medium
- NC - Neighborhood Commercial
- C-A - Commercial Auto
- IF - Industrial Flex
- IP - Industrial Park
- PUB - Public
- S - School
- NCP - Neighborhood/Community Park
- OS - Open Space
- FLDWY - Floodway
- U - Utility
- SP-D - Downtown SP
- SP1 - Hitch Ranch SP
- SP2 - Moorpark Highlands SP
- SP92-1 - Carlsberg SP
- ROW - Right of Way

MADE BY MOORPARK General Plan 2050

Draft Environmental Impact Report

0 1,000 2,000 4,000 FT

Source: PlaceWorks, 2022

Date: 11/1/2022

3. Project Description

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3.5.1.4 COMPARISON OF EXISTING LAND USES AND LAND USES AT BUILDOUT

As detailed in Table 3-5, *Comparison of Existing Conditions to Buildout of the Moorpark General Plan 2050*, the Moorpark General Plan 2050 would result in a potential buildout total of 17,025 housing units, 53,781 residents, 13,567,083 nonresidential square feet, and 20,249 jobs. Compared to existing conditions, the proposed project would result in an increase of 5,488 units, 17,336 residents, 4,783,912 nonresidential square feet, and 7,334 jobs.

Table 3-5 Comparison of Existing Conditions to Buildout of the Moorpark General Plan 2050

Scenario	Acres	Residential Units	Population	Nonresidential Square Feet	Employment
Existing Conditions	7,992	11,537	36,445	8,783,171	12,915
Proposed Land Use Plan	7,992	17,025	53,781	13,567,083	20,249
Net Difference (Proposed General Plan - Existing)	**0**	**+5,488**	**+17,336**	**+4,783,912**	**+7,334**

Buildout projections shown in Table 3-5 are used throughout this DEIR to estimate the magnitude of development that could likely occur in Moorpark upon implementation of the proposed project to Year 2050. Population projections are a liberal estimate based on full buildout of the 2050 Moorpark General Plan to support the CEQA analysis. However, the current general plan failed to reach its population projection during the plan period because ultimate buildout and development is largely dependent upon social and economic forces outside of the scope and control of the general plan. The table also shows the difference between potential growth and the amount of development as of 2018. Land use calculations are used to estimate the number of dwelling units, residents, square feet of nonresidential uses, and employees that could be generated by proposed land uses. These projections are then used to provide a liberal estimate how much noise, traffic, and other impacts could occur due to these changes.

3.5.1.5 ZONING CODE UPDATE

At the same time as the General Plan update, the City is updating its zoning code to maintain consistency with the Moorpark General Plan 2050 and implement several of its programs. The zoning code update includes adjustments to development standards for current residential, commercial, and industrial zones for consistency with increased densities and intensities assigned to corresponding land use designations in the Moorpark General Plan 2050. The update also includes the addition of five new zones to accompany new land use designations created in the Moorpark General Plan 2050: Mixed Use Low (MUL), Mixed Use Medium (MUM), Mixed Use District (MUD), Industrial Flex (IF), and Multifamily Residential (R-3), with corresponding changes to the zoning map. For consistency with State law and guidelines, the zoning code update also includes revisions to standards for specific uses, permitted uses, and administrative procedures to streamline housing production.

3.6 INTENDED USES OF THE EIR

This is a program EIR that examines the potential environmental impacts of the proposed General Plan Technical Update. This DEIR also addresses various actions by the City and others to adopt and implement the Moorpark General Plan 2050. It is the intent of the DEIR to evaluate the environmental impacts of the proposed project, thereby enabling the City of Moorpark, other responsible agencies, and interested parties to make informed decisions with respect to the requested entitlements. The anticipated approvals required for this project are included in Table 3-6, *Project Approvals Needed*.

Table 3-6 Project Approvals Needed

Lead Agency	Action
City of Moorpark City Council	• Certification of the Program EIR • Adoption of the Moorpark General Plan 2050 • Adoption of the Findings of Fact and Statement of Overriding Considerations • Adoption of the Mitigation Monitoring Program • Adoption by Ordinance of the Zoning Code update. • Adoption of any ordinances, guidelines, programs, actions, or other mechanisms that implement the Moorpark General Plan 2050
Responsible Agencies	**Action**
California Department of Forestry and Fire Protection (CAL FIRE)	• Review of the Public Safety Element for policies in state responsibility areas and very high fire hazard severity zones
California Department of Housing and Community Development (HCD)	• For certification of the Housing Element

3.7 REFERENCES

California Department of Finance. 2021. CA DOF E-5: Population and Housing Estimates for Cities, Counties, and the State, 2011-2021 with 2010 Census Benchmark.

US Census Bureau. 2022. LEHD Origin-Destination Employment Statistics Data (2002-2019). LODES 7.5. https://lehd.ces.census.gov/data/#lodes.

4. Environmental Setting

4.1 INTRODUCTION

The purpose of this section is to provide, pursuant to provisions of the California Environmental Quality Act (CEQA) and the State CEQA Guidelines, a "description of the physical environmental conditions in the vicinity of the project, as they exist at the time the notice of preparation is published, from both a local and a regional perspective." The environmental setting will provide a set of baseline physical conditions from which the lead agency will determine the significance of environmental impacts resulting from the proposed project. In addition, subsections of Chapter 5, *Environmental Analysis*, provide more detailed descriptions of the local environmental setting for the environmental topical areas. The extent of the potential physical impacts differs for each environmental topical area. Individual environmental topical sections expand on the cumulative context in which environmental impacts are analyzed.

For many environmental impacts, the setting is contiguous with the boundaries of the City of Moorpark. In some environmental topical sections—air quality, biological resources, greenhouse gas (GHG) emissions, and traffic—the setting is based on a larger, more regional context. Section 4.2, *Regional Environmental Setting*, expands on the regional environmental context. Section 4.4, *Assumptions Regarding Cumulative Environmental Impacts*, describes the context for cumulative impacts and how they are determined for the different environmental topics.

4.2 REGIONAL ENVIRONMENTAL SETTING

4.2.1 Regional Location

The City of Moorpark is in eastern Ventura County in the Transverse Ranges of Southern California, as shown in Figure 3-1*, Regional Context*, and Figure 3-2, *Citywide Aerial*, in Chapter 3, *Project Description*. It is generally bounded by the City of Simi Valley to the east, the Tierra Rejada Valley and City of Thousand Oaks to the south, and unincorporated lands in Ventura County to the west and north. The city's northerly boundary is largely mountainous. Lands west of the city are largely agricultural and protected from development by the Save Open Space and Agricultural Resources (SOAR) voter-approved initiatives, which require the public's vote before any agricultural or open space lands are rezoned for development. Regional access to Moorpark is provided by the Ronald Reagan Freeway (SR-118) and State Route 23 (SR-23), and rail service to the Los Angeles basin and destinations to the north is provided by MetroLink and Amtrak from the station on High Street.

4.2.2 Regional Planning Considerations

Southern California Association of Governments

The Southern California Association of Governments (SCAG) represents Imperial, Los Angeles, Orange, Riverside, San Bernardino, and Ventura counties. SCAG is a regional planning agency and a forum for addressing regional issues concerning transportation, the economy, community development, and the environment. Advisory policies and programs adopted by SCAG to promote regional objectives are expressed in its Regional Transportation Plan (RTP). SCAG is also the regional clearinghouse for projects requiring environmental documentation under federal and state law. In this role, SCAG reviews proposed development and infrastructure projects to analyze their impacts on regional planning programs such as the Regional Housing Needs Assessment and the RTP.

SCAG 2020-2045 Regional Transportation Plan / Sustainable Communities Strategy

SCAG's Regional Council adopted the 2020–2045 RTP/SCS (Connect SoCal) on September 3rd, 2020. The 2020–2045 RTP/SCS was adopted as part of SCAG's planning obligations. The 2020–2045 RTP/SCS is an important planning document for the region that balances future mobility and housing needs with economic, environmental, and public health goals. The plan charts a course for closely integrating land use and transportation so that the region can grow smartly and sustainably. The 2020–2045 RTP/SCS includes land use policies to guide the region's development, including planning for additional housing and jobs near transit, and planning for changing demand in types of housing. One goal of the 2020–2045 RTP/SCS is to encourage land use and growth patterns that facilitate transit and active transportation (SCAG 2021).

Ventura County Air Pollution Control District

The City of Moorpark is in the South Central Coast Air Basin (SCCAB), which comprises Ventura County, Santa Barbara County, and San Luis Obispo County, which is managed by the Ventura County Air Pollution Control District (APCD). Ventura County APCD is the agency responsible for improving air quality in the SCCAB and ensuring that the National and California Ambient Air Quality Standards are attained and maintained. Ventura County APCD is responsible for preparing the air quality management plan (AQMP) for the SCCAB in coordination with SCAG.

Ventura County APCD adopted the 2016 Ventura County AQMP on February 14, 2017. The 2016 AQMP presents Ventura County's strategy (including related mandated elements) to attain the 2008 federal 8-hour ozone standard by 2020, as required by the federal Clean Air Act Amendments of 1990 and applicable US Environmental Protection Agency (EPA) clean air regulations. Photochemical air quality modeling and related analyses, including a Weight of Evidence assessment conducted for the 2016 AQMP, indicate that Ventura County will attain the 2008 federal 8-hour ozone standard by 2020 using local, state, and federal clean air programs. Similarly, the required Reasonable Further Progress demonstration shows that Ventura County will achieve the required annual incremental emissions reductions for the purpose of ensuring attainment by the attainment year (Ventura County APCD 2017). Ventura County APCD is in the process of updating its AQMP. The Draft 2020 AQMP was released August 31, 2022, and is anticipated to be heard for adoption by the Board in December 2022.

California Air Resources Board

Current State of California guidance and goals for reducing GHG emissions are generally embodied in Assembly Bill 32 (AB 32), Senate Bill 32 (SB 32), AB 1279, and SB 375. To achieve the emissions reductions of AB 32 and SB 32, CARB prepared the 2017 Climate Change Scoping Plan, which establishes an emissions limit of 260 million metric tons of CO_2-equivalent emissions for the year 2030, that is, a 40 percent decrease in 1990 levels by 2030 (CARB 2017). In addition, CARB released the Draft 2022 Scoping Plan Update to address the State's carbon neutrality targets of Executive Order B-55-18 (CARB 2022), which has since been superseded by passage of AB 1279 on September 16, 2022.

If the estimated GHG reductions from the known commitments are not realized due to delays in implementation or technology, the post-2020 Cap-and-Trade Program would deliver the additional GHG reductions in the sectors it covers to ensure the 2030 target is achieved. In addition to these statewide strategies, the 2017 Climate Change Scoping Plan also identified local governments as essential partners in achieving the state's long-term GHG reduction goals and identified local actions to reduce GHG emissions. As part of the recommended actions, CARB recommends statewide targets of no more than six metric tons of CO_2-equivalent emissions or less per capita by 2030 and two metric tons or less per capita by 2050 (CARB 2017).

Regional/Statewide Efforts for Agricultural Preservation

The California Land Conservation Act of 1965, or Williamson Act, allows city or county governments to preserve agricultural land or open space through contracts with landowners. Contracts last 10 to 20 years and are automatically renewed unless a notice of nonrenewal is issued by the landowner.

Save Open Space and Agricultural Resources

SOAR is a set of laws adopted by the local governments of Ventura County in order to control urban sprawl in the county. In Ventura County's unincorporated lands, SOAR requires the County Board of Supervisors to receive approval from voters all over the county before any up-zoning of unincorporated land currently designated for agricultural, open space, or rural land uses. SOAR establishes city-urban restriction boundaries (CURB) around the perimeters of each incorporated city in Ventura County. If City leadership seeks to expand their CURB beyond its existing limits, they must have the approval of a majority of voters in the city. Each community in Ventura County voted in 2016 to extend their participation in SOAR past the original initiative's expiration date of 2020. In Moorpark, SOAR was re-extended by Measure E to continue until December 31, 2050 (Moorpark 2020). There are no SOAR lands within Moorpark, but the CURB boundary, as defined by the City's Municipal Code, excludes one open space parcel adjacent to the Tierra Rejada Greenbelt.

To direct growth away from agricultural and open space lands, Ventura County, cities within the county, and the Local Agency Formation Commission also adopted the Guidelines for Orderly Development (Guidelines) in 1969 and revised them in 1996. The Guidelines encourage urban development within cities whenever and wherever practical; clarify the relationship between the cities and the County with respect to urban planning; facilitate a better understanding regarding development standards and fees; and identify the appropriate governmental agency responsible for making determinations on land use requests (Moorpark 2020).

Los Angeles Regional Water Quality Control Board

The city is within the Calleguas Creek watershed and falls under the Los Angeles Regional Water Quality Control Board (RWQCB) and its Basin Plan. The Basin Plan specifically (1) designates beneficial uses for surface waters and groundwaters, (2) sets narrative and numerical objectives that must be met to protect the beneficial uses and conform to the state's antidegradation policy, and (3) describes implementation programs to protect all waters in the region. The Los Angeles RWQCB Basin Plan provides all relevant information necessary to carry out federal mandates for the antidegradation policy, 303(d) listing of impaired waters, and related total maximum daily loads and provides information about the National Pollutant Discharge Elimination System and Waste Discharge Requirement permit limits (Moorpark 2020).

Ventura County Watershed Protection District: Calleguas Creek Watershed

The City of Moorpark resides entirely within the Calleguas Creek Watershed, a flood control zone monitored by the Ventura County Watershed Protection District as well as the Los Angeles RWQCB. Additionally, the Watersheds Coalition of Ventura County manages the Integrated Regional Water Management Planning program for all of Ventura County, including Calleguas Creek. The Calleguas Creek Watershed drains an area of 343 square miles in southern Ventura County and a small portion of western Los Angeles County. Within Ventura County, the Calleguas Creek Watershed consists of the Calleguas Creek, Arroyo Las Posas, Revolon Slough, Conejo Creek, Arroyo Conejo, Arroyo Santa Rosa, and Arroyo Simi (Moorpark 2020).

The city and its existing developments are entirely tributary to Calleguas Creek Reach 6 (Arroyo Simi), where flows travel generally westerly. Once flows pass the western edge of the city, the watercourse changes names to Arroyo Las Posas (another reach of Calleguas Creek). The major tributaries and flood control facilities that run through the city and tie into Arroyo Simi include Peach Hill Wash, Gabbert-Walnut Canyon, Happy Camp Canyon, Strathearn Canyon, and No. 2 Canyon. The district's maintained facilities include Gabbert Canyon, Walnut Canyon, Strathearn Canyon, and Happy Camp Canyon (Moorpark 2020).

Groundwater Management

Since the City draws groundwater from the East Las Posas Valley groundwater basin, it must coordinate with the Fox Canyon Groundwater Management Agency (FCGMA). The FCGMA's jurisdictional area encompasses about 118,000 acres (185 square miles). The FCGMA was initially created to manage the groundwater in overdrafted and potentially seawater-intruded areas in Ventura County. The prime objective of the FCGMA was to preserve groundwater resources for agricultural, municipal, and industrial uses. Specifically, in the East Las Posas Valley groundwater basin, chronic declines in groundwater elevation, loss of storage, and the potential for subsidence related to groundwater withdrawal were identified as having the potential to impact beneficial uses of groundwater (Moorpark 2020).

The greater Las Posas Valley Basin (comprising East, West, and South groundwater basin areas) is bounded on the south by the Camarillo and Las Posas Hills and on the north by South Mountain and Oak Ridge. Arroyo Simi has been identified as a surface water body that may have a connection to the East Las Posas Valley groundwater basin. However, the Las Posas Valley Basin is not adjudicated. Based on state bulletins, the Las Posas Valley Basin is not specifically identified as a basin in an overdraft condition. Despite this, according to

the Groundwater Sustainability Plan that FCGMA developed in 2019, permits must be obtained from FCGMA prior to the construction of new wells. The Groundwater Sustainability Plan is required to be updated every five years (Moorpark 2020).

Regional Habitat Conservation Plans and Areas

No natural community conservation plans or habitat conservation plans permitted by the California Department of Wildlife occur in the City of Moorpark or County of Ventura. As identified in Section 2.4, Municipal Code Title 17, Zoning, the approved Moorpark Highlands Specific Plan II will permanently preserve 169 acres of land in a habitat conservation plan, providing open space that enhances the habitat within 94 of those acres and multiuse trails for access to these areas by the public. These areas shall remain ungraded and shall not be developed, with the exception of roadway and infrastructure improvements necessary for the construction of Spring Road. The natural open space zone areas impacted by grading for Spring Road shall be recontoured and revegetated to the standards defined in the design guidelines, Section 8, of Specific Plan II. Subsequent revegetation and/or maintenance activities within the natural open space areas shall be limited to the activities prescribed in Section 2.4, Municipal Code Title 17 (Moorpark 2020).

California Pepper Trees Maintenance Plan

In 2006, the City prepared the California Pepper Trees Maintenance Plan for the maintenance and care of the historic pepper tree canopy along High Street. The trees, which were planted by city founders in the early 1900s, are recognized as Historical Landmarks of Ventura County. The plan describes the history of the tree canopy, establishes tree categories by condition, and evaluates the physical condition of each pepper tree in the High Street corridor area. It also prescribes treatment and maintenance techniques for each tree discussed consistent with its current conditions and needs (Moorpark 2020).

4.3 LOCAL ENVIRONMENTAL SETTING

4.3.1 Existing Land Use

The City of Moorpark encompasses 7,992 acres. Table 3-1, *Existing Land Use Summary,* and Figure 3-3, *Existing Land Use*, in Chapter 3, *Project Description*, show the distribution of existing land uses and the number of housing units, households, population, nonresidential square footage, and jobs in Moorpark.

Moorpark is characterized as a low intensity suburban community containing a mix of residential neighborhoods, commercial corridors and centers, industrial districts, civic and educational facilities, parklands, and open spaces. Moorpark's largest existing land use is residential and open space and recreation. Residential represents approximately 28 percent of the area within the city. Open space and recreation land uses consist of golf courses, local parks, regional parks, and other reserved open spaces and natural areas, and also represents 28 percent of the city's land (Moorpark 2020). Figure 4-1, *Moorpark Neighborhood and District Areas*, identifies the neighborhoods and active homeowner associations. Neighborhoods in Moorpark are:

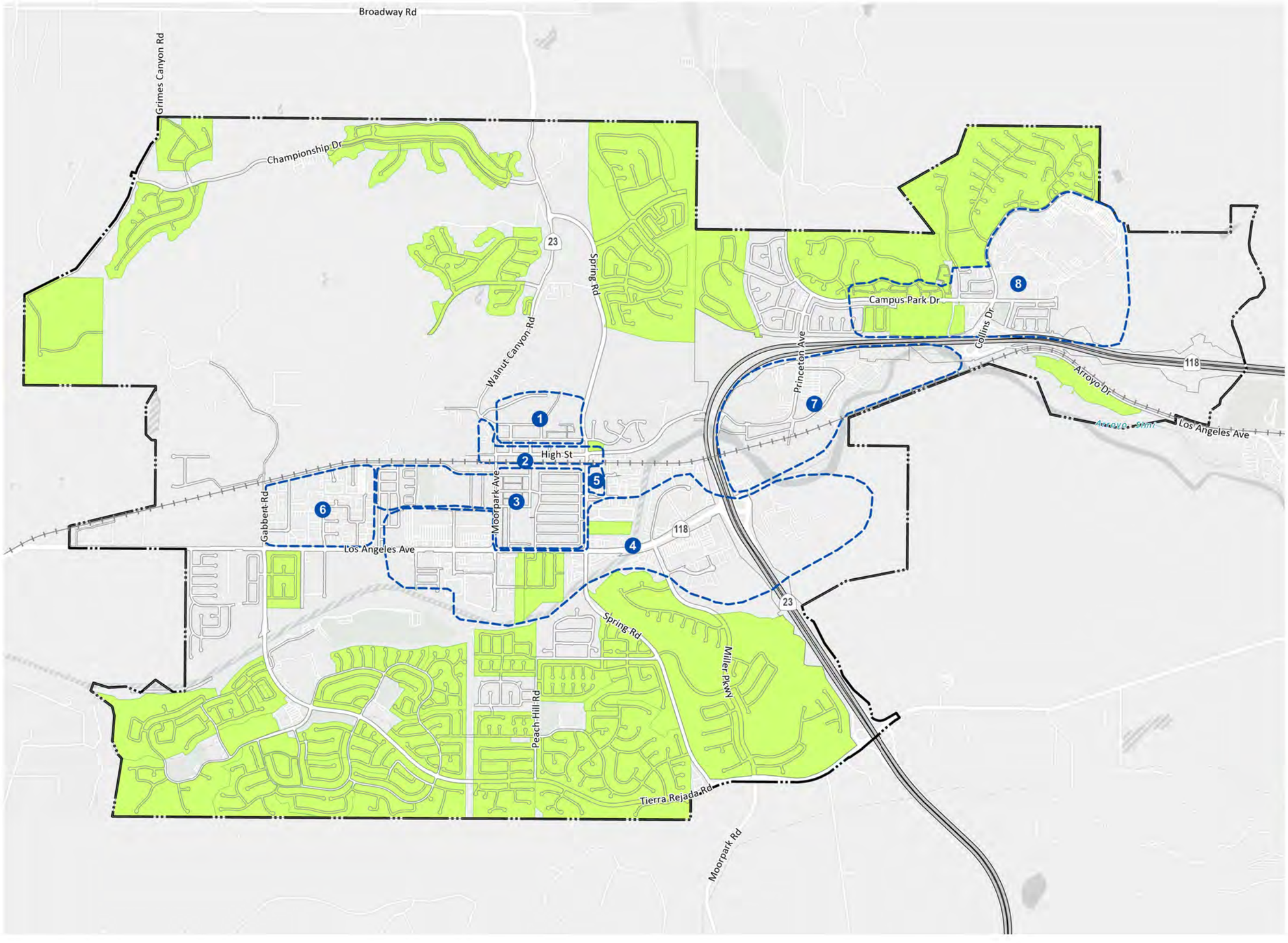
- **Charles Street Neighborhood.** The earliest residential development in Moorpark, consisting predominantly of single-family housing on small lots, with scattered small apartments, abutting a commercial core along High Street that served as the center of community business and activity.

- **Downtown District.** The Downtown District consists of the High Street Corridor and Civic Center area. The High Street Corridor is the earliest developed core of Moorpark where residents purchased goods, worked, dined, and enjoyed entertainment and culture prior to the city's rapid growth beginning in the 1980s. It also served as the point for distribution of local agricultural products to the region from the local railroad station. Its buildings are directly along the street frontage, enabling access by walking from Charles Street and other neighborhoods. Its history, concentration and orientation of buildings to the street, and presence of the Amtrak/MetroLink transit station offer the opportunity for revitalization as an active, pedestrian-oriented environment clearly distinguished as the downtown. Moorpark's Civic Center anchors the western edge of the Downtown District and encompasses the center of governance, City Hall, library, and community rooms.

- **Traditional/Core Neighborhood.** The area generally between the railroad and Los Angeles Avenue served for many years as the residential core of Moorpark. It is primarily developed with one-story, single-family housing on 5,000-square-foot lots with scattered public and private schools, including the Flory Academy of Science and Technology, Chaparral Middle School, and Poindexter Park.

- **Los Angeles Avenue Corridor.** Los Angeles Avenue, which runs concurrently with state-owned route 118, is the primary travel corridor that runs east-west, bisecting the city. Though it is considered a distinct district due to its automobile orientation, it is really a composite of subdistricts distributed along its length, including multitenant retail commercial centers and industrial/office parks, abutted by multifamily apartments and condominiums primarily south of Los Angeles Avenue. Common to these are their primary access from and to Los Angeles Avenue. Generally, retail and office uses are clustered on large scale properties with extensive surface parking lots and few pedestrian-oriented amenities. Among the retail centers are the Moorpark Marketplace, Moorpark Plaza, Moorpark Town Center, Tuscany Square, and Ortho/Warehouse Discount Center. A few smaller properties are developed with single tenant retail and office uses, primarily at major street intersections. The types of uses and physical form of these centers are illustrative of the shift away from the history of compact town centers, such as High Street, to auto-oriented single destination places.

Figure 4.1
Neighborhoods and Districts



City Boundary
Railroad
Neighborhood and District Areas

District Name

1 - Charles Street Neighborhood
2 - Downtown District
3 - Traditional/Core Neighborhood
4 - Los Angeles Avenue Corridor
5 - Spring Street Corridor
6 - Western Industrial Park
7 - Princeton Industrial Area/Virginia Colony
8 - College Neighborhood

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4. Environmental Setting

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- **Spring Road Corridor.** The east side of the northern Spring Road contains a mix of public and quasi-public uses that, in many respects, represent a second concentration of civic and public service uses. Among these are the Police Department, Family Medical Center, Food Pantry, and Family Resource Center. Largely these are single-purpose structures with surface parking lots on separate parcels.

- **West End Industrial Park.** Properties extending from Los Angeles Avenue to Poindexter Avenue toward the west end of the city are developed for industrial and office uses in a landscaped business park setting, with individual buildings surrounded by parking spaces and landscaped open spaces.

- **Princeton Industrial Area/Virginia Colony.** In many respects, the area south of the intersection of the SR-118 and SR-23 freeways is physically isolated from the remainder of Moorpark and is bisected by the railroad and the Arroyo Simi. In its southwest is of one of the city's earliest developments, the Virginia Colony, containing medium to large single-family homes and townhomes and a neighborhood park. Approximately two-thirds of the area north of the Colony are developed with two large industrial parks with large footprint concrete tilt-up buildings, surface parking lots, and extensive landscaping along the Princeton frontage and on individual properties. A mix of financial, technology, and other businesses are located here, including PennyMac, one of the city's largest employers and an anchor tenant for the area.

- **Moorpark College Community.** Moorpark College occupies the northeast edge of the city, surrounded by clusters of single-family housing, multifamily apartments, a small commercial center to its southwest, and open space to its north and east. Its location and role as a commuter college largely isolates it from Moorpark, though a number of students live in the apartments along Campus Park and in the Virginia Colony.

- **Residential Neighborhoods.** Residential neighborhoods are the predominant land use in Moorpark. These range from traditional small and medium lot grid and modified street grid configurations to large scale master planned communities containing community facilities, parks, and extensive networks of open space and trails. Some of the newer neighborhoods, particularly in the southeast of the city, are developed with controlled access as gated communities. Schools, parks, and religious facilities are integrated in many of these neighborhoods. A number of the neighborhoods are recognized as distinct places due to the name applied to their subdivision.

4.3.2 Current Land Use Designations and Zoning

Current Moorpark General Plan

Figure 3-4, *Current Land Use Plan*, and Table 3-2, *Current Moorpark General Plan Land Use Summary*, in Chapter 3, *Project Description*, presents a breakdown of the land use buildout in the City under the current General Plan.

Zoning

The Moorpark Zoning Ordinance (Title 17) of the Moorpark Municipal Code establishes the zoning districts for each parcel throughout the city. The zoning districts are the City's codes and regulations by which it controls and permits activities and the physical form of structures on each parcel. The zoning districts are more stringent

than the land use designations because they apply the general vision of the Land Use Element to reflect the specific characteristics, opportunities, and challenges for each property. The current Moorpark zoning districts are shown in Figure 4-2, *Zoning*.

Approved Specific Plans

Moorpark has four approved Specific Plans:

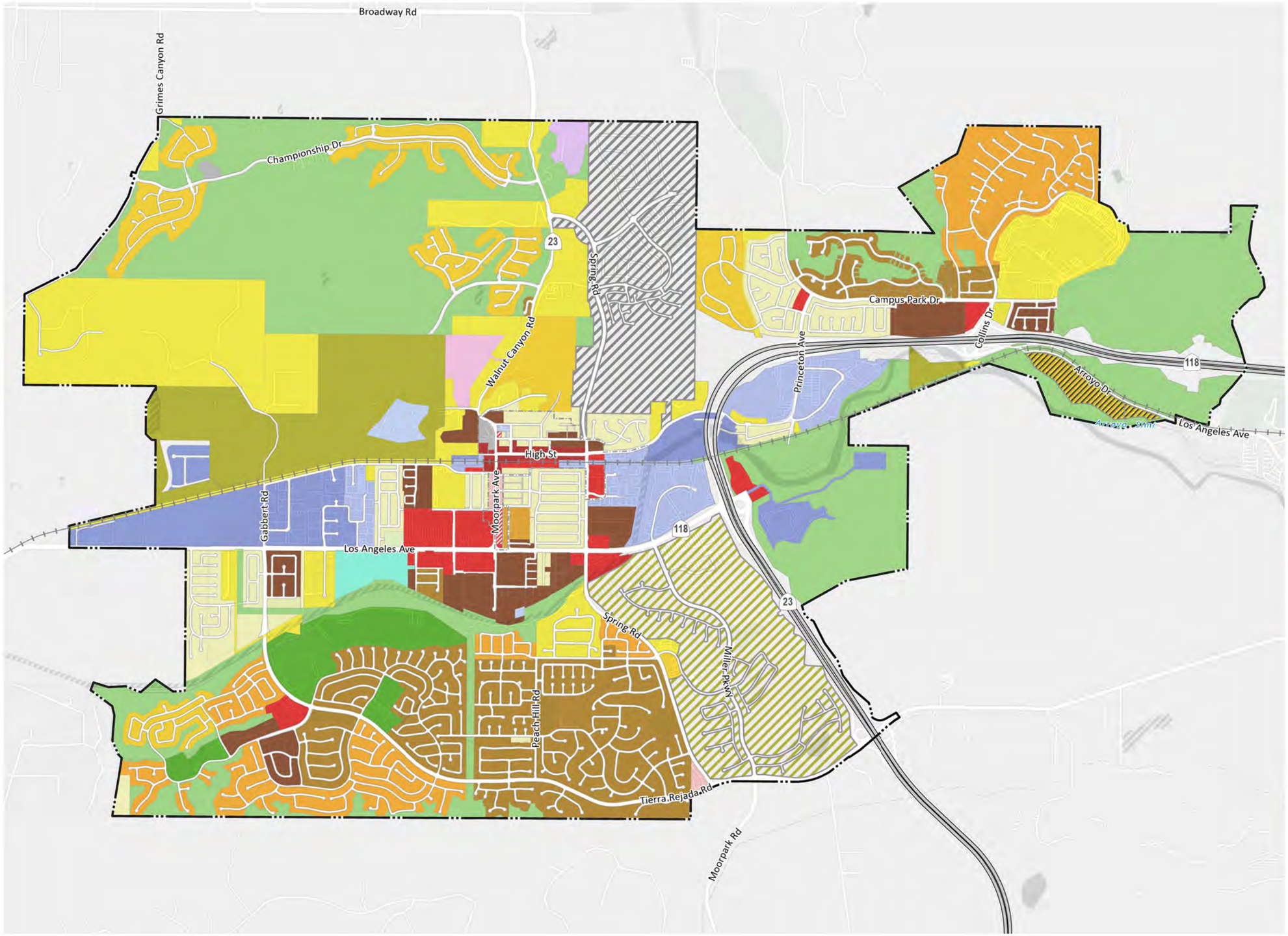
- **Carlsberg Specific Plan.** The Carlsberg Specific Plan, adopted October 30, 1990, and subsequently amended on September 7, 1994, covers a 500-acre site in the southeastern area of Moorpark. The Specific Plan intends to implement programs for the physical and economic development of the community, maintain consistency with the City's General Plan, and build a variety of land uses to help Moorpark balance its jobs-to-housing ratio, among other goals. The Specific Plan includes a mix of uses, including residential, commercial, office/business, as well as recreational and educational facilities. The Specific Plan has been substantially implemented.

- **Moorpark Highland Specific Plan II.** The Moorpark Highlands Specific Plan II, adopted June 1999, covers a 445-acre site in the northern section of Moorpark. It is intended to guide the phased development of a new residential neighborhood with supporting parks and schools balanced by the preservation of surrounding open spaces. It includes plans for the phasing and financing of requisite facilities and infrastructure. There remain a few residential parcels to be developed. All other parcels have been developed or protected as open space.

- **Downtown Specific Plan.** The Downtown Specific Plan, adopted October 7, 1998, and most-recently amended September 7, 2022, encompasses the Moorpark Downtown Area and Old Moorpark along and surrounding Moorpark Avenue and High Street. The plan envisions transforming Downtown Moorpark into a vibrant commercial and residential destination in the heart of the city. The plan functions much like an early version of a form-based code, emphasizing the look, feel, and scale of buildings and the public and/or private spaces in between. Development standards are included to guide building renovations, additions and new development. Guidelines are defined for building materials, street trees, landscaping, and streetscape features. The plan also outlines the envisioned uses for each parcel in the planning area, including residential, multifamily, mixed-use, and commercial uses. In addition, the plan prescribes roadway improvements and circulation changes and lists the various infrastructure features and services in the area. Finally, the plan contains implementation programs and potential funding sources to finance and execute the plan's vision. The Downtown Specific Plan's vision has only been partially implemented.

- **Hitch Ranch Specific Plan.** The Hitch Ranch Specific Plan was adopted June 15, 2022. The Specific Plan encompasses seven parcels, totaling approximately 277.30 acres of land in the rolling hills north of Poindexter Avenue and west of Moorpark Avenue (SR-23). The Specific Plan allows development of a variety of residential, recreational, and public uses within the Specific Plan area. The regulations and guidelines of the Specific Plan ensure that these uses, and the associated infrastructure elements and public spaces, are planned and designed in an integrated manner.

Figure 4.2
Zoning



Zoning

Open Space / Agriculture
- A-E
- PC
- OS
- OS-10AC
- OS-40AC
- OS-20AC
- OS-500AC

Residential
- R-1
- R-1-6
- R-1-7
- R-1-8
- R-1-9
- R-1-13AV
- RA-10AC
- RE
- RE-1AC
- RE-5AC
- RE-20
- RO
- R-2
- RPD-1U
- RPD-1.48U
- RPD-1.6U
- RPD-1.63U
- RPD-1.733U
- RPD-1.8U
- RPD-1.84U
- RPD-2.2U
- RPD-2.45U
- RPD-2.5U
- RPD-3.1U
- RPD-3.65U
- RPD-4U
- RPD-4.5U
- RPD-4.6U
- RPD-5U
- RPD-6U
- RPD-6.5U
- RPD-7U
- RPD-7-14U
- RPD-8U
- RPD-8.4U
- RPD-8.9U
- RPD-9U
- RPD-9.1U
- RPD-10U
- RPD-12U
- RPD-12.21U
- RPD-15U
- RPD-16.2U
- RPD-16.5U
- RPD-16.83U
- RPD-17.2U
- RPD-19.0U
- RPD-20U
- RPD-20U-N-D

Commercial
- CO
- C-1
- C-2
- CPD
- C-OT

Industrial
- M-1
- M-2
- I

Misc
- Carlsberg Specific Plan
- Moorpark Highlands Specific Plan
- TPD
- Downtown Specific Plan

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4.3.3 Public Services and Utilities

Public services and utilities are provided in the City of Moorpark by the providers listed in Table 4-1*, Public Service and Utility Providers*. Additional information describing the existing provision of services and utilities is in Sections 5.15, *Public Services*, and 5.19, *Utilities and Service Systems*.

Table 4-1 Public Service and Utility Providers

Public Services	
Police	Ventura County Sheriff's Department
Fire Protection and Emergency Medical Services	Ventura County Fire Department
Public Schools	Moorpark Unified School District
Library	Moorpark City Library
Utilities and Infrastructure	
Water	Ventura County Waterworks District No. 1
Wastewater Treatment	Ventura County Waterworks District No. 1
Regional Flood Control	Ventura County Watershed Protection
Solid Waste Collection	Waste Management
Solid Waste Disposal (Landfills)	Ventura Regional Sanitation District (VRSD)
Electricity	Southern California Edison (SCE) Clean Power Alliance (CPA)
Natural Gas	Southern California Gas Company (SoCalGas)

4.3.4 Vulnerable Communities in Moorpark

State law defines "environmental justice" as the availability of a healthy environment for all people. It refers to a condition where all residents, regardless of status (e.g., residence, income, age, race/ethnicity, health condition, etc.), are afforded the same degree of protection from environmental and health hazards. This is a challenge in southern California. Historical patterns of land use, transportation infrastructure, industries, and discrimination have led to inequities. The combination of one or more of these factors has led to situations where certain areas are near unhealthful levels of pollution, which, combined with vulnerable populations, places people at greater risk of poorer health.

To assist in identifying areas where environmental justice concerns may exist, the California Environmental Protection Agency developed "CalEnviroScreen." This screening tool provides data that can help identify communities disproportionately impacted by or vulnerable to environmental pollution or other social factors correlated with poorer health. The tool contains 12 indicators related to pollution burden and 8 indicators related to population characteristics and other vulnerabilities. CalEnviroScreen uses a formula to calculate pollution burden and population characteristics based on these indicators. These two scores are multiplied together to arrive at an "EJ score" for every census tract in California. All census tracts are ordered from highest

to lowest score so that it is possible to show how each census tract compares to all other tracts in California. Census tracts where the EJ score is high suggests the presence of environmental justice issues.

Moorpark CalEnviroScreen Assessment

Moorpark does not have any census tracts that would fall within three of the four definitions of a disadvantaged community. Though Moorpark does not have a disadvantaged community, the older downtown has the greatest concentration of large households and minority and low-income residents. As depicted in Figure 4-3, *Vulnerable Communities in Moorpark*, it includes the census tract bounded on the south by Los Angeles Avenue and by Poindexter to the north. The Charles Street neighborhood has similar characteristics as the downtown area south of Poindexter. Conditions in downtown include:

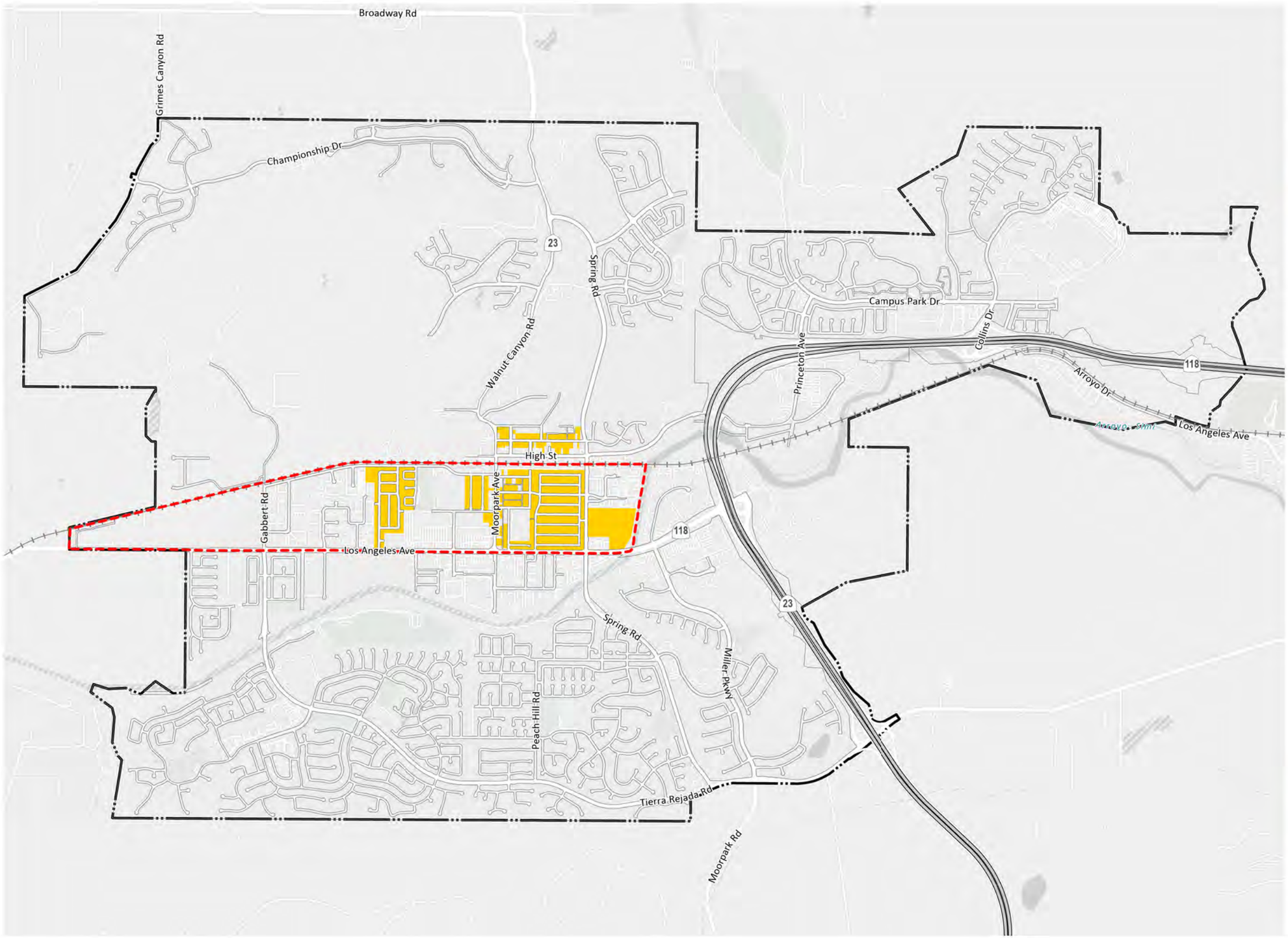
- **Minority concentration.** 80 percent of residents are minorities (78 percent of Hispanic origin) compared to 32 percent citywide. Approximately 20 percent of residents are linguistically isolated, making it more difficult to participate in public affairs in the community.
- **Larger households.** The average household size is 4.8 persons, which is 50 percent higher than the citywide average of 3.2 persons. Approximately 20 percent of households in downtown Moorpark live in overcrowded housing versus 3 percent citywide.
- **Lower Incomes.** The median income of households in downtown Moorpark is about $60,000—more than 40 percent below the City's median income of $105,000. The poverty rate in downtown Moorpark exceeds 25 percent—four times more than the 6 percent poverty rate citywide.
- **Housing Overpayment.** Housing overpayment affects over half of all households living in downtown Moorpark. Many households experience severe overpayment because of their relatively lower incomes or overcrowded situations where families may double up to afford housing costs. (Moorpark 2020)

4.4 ASSUMPTIONS REGARDING CUMULATIVE IMPACTS

Section 15355 of the CEQA Guidelines defines cumulative impacts as "two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts." Cumulative impacts are the change caused by the incremental impact of an individual project compounded with the incremental impacts from closely related past, present, and reasonably foreseeable probable future projects. Cumulative impacts can result from individually minor but collectively significant projects taking place over a period of time.

Section 15130 of the CEQA Guidelines states that cumulative impacts shall be discussed when the project's incremental effect is considerable. It further states that this discussion of cumulative impacts shall reflect the severity of the impacts and the likelihood of occurrence, but the discussion need not provide as great detail as is provided for the effects attributable to the project alone. The CEQA Guidelines (Section 15130 [b][1]) state that the information utilized in an analysis of cumulative impacts should come from one of two sources:

Figure 4.3
Vulnerable Communities



City Boundary
Railroad
Census Tract 6111007611
Residential Areas

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1) 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.

2) 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 areawide conditions contributing to the cumulative impact. Any such planning document shall be referenced and made available to the public at a location specified by the lead agency.

The cumulative impact analysis contained in this EIR uses method No. 2. Consistent with Section 15130(b)(1)(B) of the CEQA Guidelines, this EIR analyzes the environmental impacts of development in accordance with the Moorpark General Plan 2050 and addresses the cumulative impacts of development in Moorpark and the larger region, as appropriate. In most cases, the potential for cumulative impacts is contiguous with the city boundary, since the City is the service provider for various services and public utilities. The Ventura County Transportation Model was utilized to estimate vehicle miles traveled for the proposed project. Therefore, potential cumulative impacts related to traffic, air quality, and noise, which have the potential for impacts beyond the city boundary, have been addressed using the traffic model, which accounts for growth in the region. Please refer to Section 5 of this EIR for a discussion of the cumulative impacts associated with development and growth in the city and region

4.4.1 References

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———. 2022, August 31. Draft 2022 Ventura County 2022 Air Quality Management Plan. http://www.vcapcd.org/AQMP-2022.htm.

4. Environmental Setting

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5. Environmental Analysis

Chapter 5 examines the environmental setting of the proposed project, analyzes its effects and the significance of its impacts, and recommends mitigation measures to reduce or avoid impacts. This chapter has a separate section for each environmental issue area. This scope was determined based on public and agency comments received during the Notice of Preparation (NOP) comment period from May 17, 2022, through June 16, 2022 (see Appendix A), and during the Scoping Meeting held on May 31, 2022. Environmental issues and their corresponding sections are:

- 5.1 Aesthetics
- 5.2 Agriculture and Forestry Resources
- 5.3 Air Quality
- 5.4 Biological Resources
- 5.5 Cultural Resources
- 5.6 Energy
- 5.7 Geology and Soils
- 5.8 Greenhouse Gas Emissions
- 5.9 Hazards and Hazardous Materials
- 5.10 Hydrology and Water Quality
- 5.11 Land Use and Planning
- 5.12 Mineral Resources
- 5.13 Noise
- 5.14 Population and Housing
- 5.15 Public Services
- 5.16 Recreation
- 5.17 Transportation
- 5.18 Tribal Cultural Resources
- 5.19 Utilities and Service Systems
- 5.20 Wildfire

Sections 5.1 through 5.20 provide a detailed discussion of the environmental setting, impacts associated with the proposed project compared to existing conditions, and mitigation measures designed to reduce significant impacts where required and when feasible. The residual impacts following the implementation of any mitigation measure are also discussed.

Organization of Environmental Analysis

To assist the reader with comparing information between environmental issues, each section is organized under eight major headings:

- Environmental Setting
- Thresholds of Significance
- Environmental Impacts
- Relevant General Plan Policies
- Level of Significance Before Mitigation
- Mitigation Measures

5. Environmental Analysis

- Level of Significance After Mitigation
- References

In addition, Chapter 1, *Executive Summary,* has a table that summarizes all impacts by environmental issue.

Terminology Used in This Draft SEIR

The level of significance is identified for each impact in this DEIR. Although the criteria for determining significance are different for each topic area, the environmental analysis applies a uniform classification of the impacts based on definitions consistent with CEQA and the CEQA Guidelines.

- **No impact.** The project would not change the environment.
- **Less than significant.** The project would not cause any substantial, adverse change in the environment.
- **Less than significant with mitigation incorporated.** The EIR includes mitigation measures that avoid substantial adverse impacts on the environment.
- **Significant and unavoidable.** The project would cause a substantial adverse effect on the environment, and no feasible mitigation measures are available to reduce the impact to a less than significant level.

5.1 AESTHETICS

This section of the Draft Environmental Impact Report (DEIR) discusses the potential impacts to the visual character within the City of Moorpark from the Moorpark General Plan 2050. This section includes a discussion of the qualitative aesthetic characteristics of the existing environment that would potentially be altered by the proposed project's implementation and the consistency of the proposed project with established relevant policies.

5.1.1 Environmental Setting

5.1.1.1 REGULATORY BACKGROUND

Visual resources in Moorpark are regulated primarily through the California Department of Transportation (Caltrans) (for highways), the Moorpark General Plan, and the Moorpark Municipal Code. Key state and local regulations follow.

State Regulations

Caltrans Scenic Highway Program

In 1963, California's Scenic Highway Program was created to preserve and protect the natural scenic beauty of California highways and adjacent corridors through special conservation treatment. The state laws governing this program are in the Streets and Highways Code, Sections 260 to 263, and Caltrans oversees the program. Caltrans defines a scenic highway as any freeway, highway, road, or other public right-of-way that traverses an area of exceptional scenic quality. Suitability for designation as a State Scenic Highway is based on the following criteria described in Caltrans's Guidelines for Official Designation of Scenic Highways (2008):

- **Vividness.** The extent to which the landscape is memorable. This is associated with the distinctiveness, diversity, and contrast of visual elements.
- **Intactness.** The integrity of visual order and the extent to which the natural landscape is free from visual intrusions (e.g., buildings, structures, equipment, grading).
- **Unity.** The extent to which development is sensitive to and visually harmonious with the natural landscape.

The City of Moorpark includes one eligible state scenic highway. State Route 118 (SR-118) is an eligible scenic highway in Moorpark that begins at the intersection of Los Angeles Avenue and SR-118 (Caltrans 2019).

Local Regulations

City of Moorpark Municipal Code

Several ordinances in the Moorpark Municipal Code provide regulations to protect visual resources within the city limits. Chapter 17.24, Development Requirements, sets forth specific development requirements for all zones in the city in order to provide adequate separation for light, air, safety, and open space as well as to provide an aesthetically pleasing environment in which to live, work, and recreate. Chapter 17.26, *Standards for Specific Zones and Zone Types*, outlines factors to be considered in establishing permit conditions and in determining appropriate intensity of development, including unique land features, scenic highway, and visual quality.

Chapter 17.38, Hillside Management, allows for orderly and sensitive development of hillside areas in conjunction with the preservation of natural open space. Specific goals and policies address development patterns that minimize erosion and geologic hazards, encouraging grading techniques that blend with the natural terrain, reducing water use in slope replanting and retention, allowing density transfer, and retaining the integrity and natural grade elevations of prominent landforms.

Chapter 17.30, Lighting Regulations, provides regulation of lighting systems constructed on properties within the various zones in the city. The City recognizes the importance of properly installed lighting to maintain aesthetic value, mitigate nuisance impacts upon abutting properties, and reduce waste of energy resources. The City prohibits outdoor lighting systems installed without proper plans and permit approvals as well as any lighting that causes glare or spillover.

Chapter 12.12, Historic Trees, Native Oak Trees and Mature Trees, enables the City to protect and preserve mature trees, native oak trees, and historic trees (especially where such trees are associated with the proposals for urban development) because trees aid in counteracting air pollution, minimizing soil erosion, and enhancing the aesthetic environment of the city.

Specific Plans

The City has adopted numerous specific plans that provide community identity and development standards for specific areas in the city. In most cases the specific plan is the guiding and governing document for certain areas and includes development regulations similar to those found in the City's Zoning Ordinance.

5.1.1.2 EXISTING CONDITIONS

Moorpark is situated amid a series of major and minor hills. These hills constitute a significant natural topographical feature of the community because they are visible to all persons traveling the major highway arteries as well as to citizens residing in and around the city. Moorpark is visually framed by the Santa Susana Mountains to the north and the Simi Hills and Santa Monica Mountains to the south. The visual elements in the open space areas of the city include the major ridgelines that form the city's boundaries, canyons, woodlands, rolling hillsides and knolls, significant stands of oak and sycamore trees, and urban parkways. The

physical characteristics of the city, in conjunction with the large amount of undeveloped land, afford residents and visitors a vast array of open spaces with plentiful scenic opportunities.

Mountains, Ridgelines, and Canyons

Mountains define the shape of Moorpark—ridgelines, slopes, and canyons contribute to the physical setting and are visible to residents and to people traveling on major highways and roadways across the city. The Santa Susana Mountains to the north are a transverse range of mountains that run east-west. South of the city boundary are hillsides with some residential uses and the Las Posas Hills, with the Santa Monica Mountains further south. Canyons in Moorpark include Campus Canyon, Rustic Canyon, Happy Camp Canyon, Gabbert Canyon, Walnut Canyon, and Strathearn Canyon.

Woodlands

The oak woodlands in the hillsides spill over into many parts of the city and contribute to its visual character. These areas support a variety of woodland habitat, such as oak and riparian woodlands, including Interior Live Oak Woodland, Valley Oak Woodland, Coast Live Oak Woodland, and Southern Cottonwood-Willow Riparian Forest. Rows of eucalyptus and stands of sycamores also exist throughout the planning area.

River, Streams, and Water Bodies

Major rivers and streams in the city include the Gabbert Canyon, Walnut Canyon, Happy Camp Canyon, Strathearn Canyon, and Peach Hill Wash. Drainages from these rivers and streams all flow across the valley floors in the city and converge in the Arroyo Simi. The Arroyo Simi is a 19-mile-long flood control channel that runs east-west throughout the city and becomes Arroyo Las Posas immediately west of the city's border. The Arroyo Simi is a distinct resource that contributes to the physical character of the city and generally divides the city into north and south regions. The Bard Reservoir, also known as the Wood Ranch Reservoir, is approximately 2.5 miles to the southeast. The reservoir is approximately 231 acres, with multiple hiking trails in its area. These water bodies offer natural greenbelts that provide a visual contrast to the developed areas that flank them.

Open Space

Natural open space linkages may include open space dedications, easements, or greenbelts. The Tierra Rejada Greenbelt is to the south and southeast of the city, a 2,331-acre site that is bordered by the Arroyo Santa Rosa and Las Posas Hills to the west, the Tierra Rejada Watershed and the cities of Moorpark and Simi Valley to the north, the city of Simi Valley to the east, and the cities of Simi Valley and Thousand Oaks to the south.

Recreational open space in the city includes public and private local, regional, state, and national parks. Protective open spaces include areas where hazardous conditions exist, but they provide scenic and visual benefits. Agricultural land makes up a significant area of the city's open space and private recreational areas.

Scenic Vistas and Corridors

A scenic vista is generally considered a viewpoint that provides expansive views of a highly valued landscape for the benefit of the general public. Panoramic views are usually associated with vantage points over a section of urban or natural area that provides a geographic orientation not commonly available. Panoramic views in the city include views of the valley floor from the Santa Susana Mountains to the north. Views of the mountains are afforded to residents and motorists traveling from both the east-west and north-south arterial roadways in the city. Other scenic corridors within the City include hiking and biking paths along the Arroyo Simi or between the city and other areas of Ventura County. As shown in Figure 5.1-1, *Scenic Corridors*, one eligible state scenic highway, SR-118, runs west to east through Ventura County (Caltrans 2019).

Light and Glare

Sources of light and glare in the city include building (interior and exterior), security, sign illumination, and parking-area lighting. Other sources of nighttime light and glare include street lights and vehicular traffic along surrounding roadways. Because the city is adjacent to urbanized cities, including Thousand Oaks to the south and Simi Valley to the east, ambient light in the community is impacted by the adjacent land uses. However, Moorpark is guarded from excessive light spillover by the Santa Susana Mountains to the north, allowing for clear day and nighttime views. Similarly, to the east and south of the city are communities that include vacant land and natural open space, allowing for clear day and nighttime views.

5.1.2 Thresholds of Significance

Appendix G of the CEQA Guidelines states that, "except as provided in Public Resources Code Section 21099," a project would normally have a significant effect on the environment if the project would:

AE-1 Have a substantial adverse effect on a scenic vista.

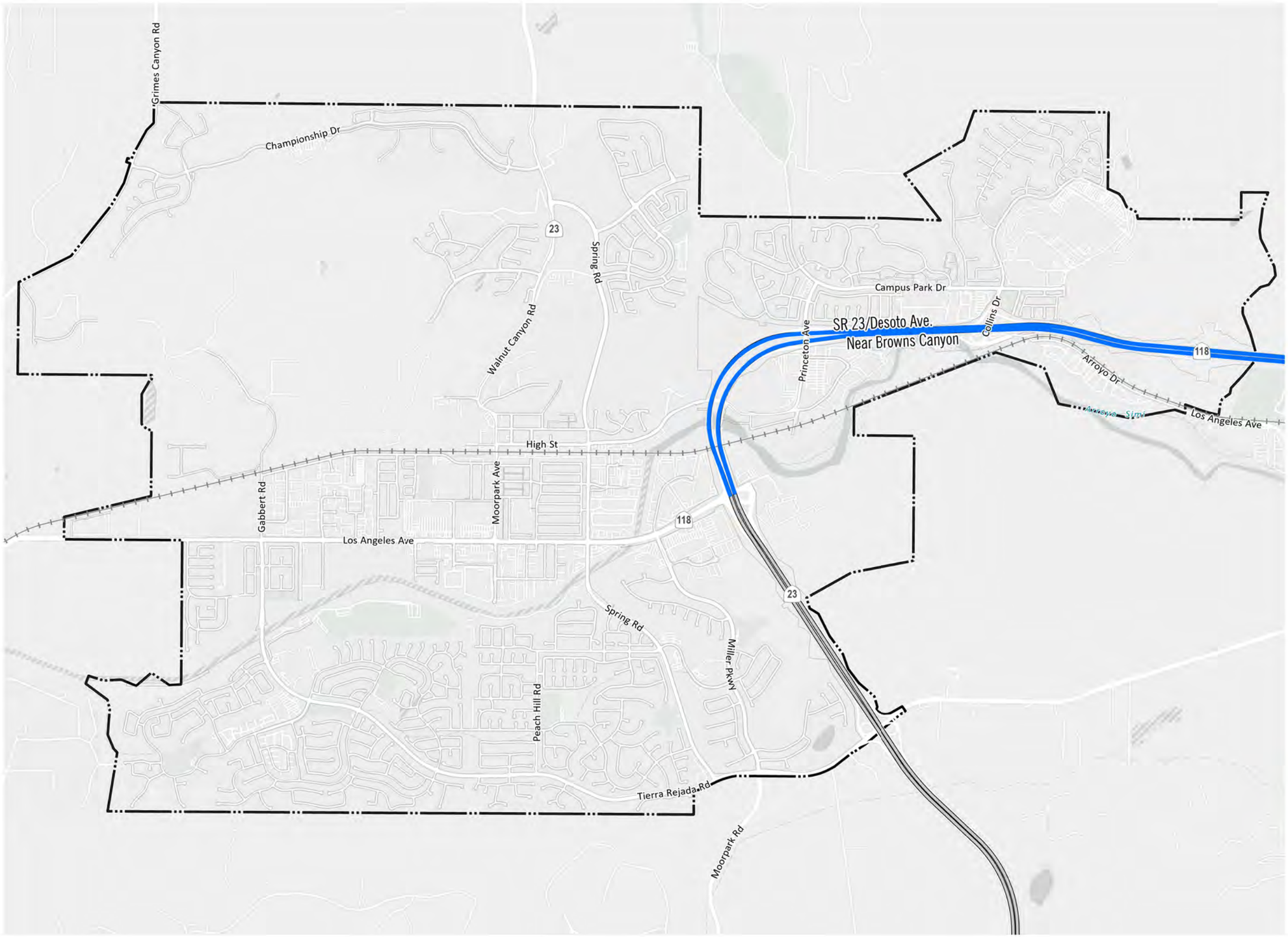
AE-2 Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway.

AE-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.

AE-4 Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area.

Figure 5.1-1

Scenic Corridors



City Boundary

Railroad

CalTrans Scenic Highways

Eligible Routes

MADE BY MOORPARK General Plan 2050

Draft Environmental Impact Report

0 1,000 2,000 4,000 FT

Source: PlaceWorks, 2022

Date: 9/28/2022

5. Environmental Analysis
AESTHETICS

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5.1.3 Environmental Impacts

5.1.3.1 METHODOLOGY

The evaluation of aesthetics and aesthetic impacts is highly subjective, yet it must objectively identify the visual features of the existing environment and their importance. The characterization of aesthetics involves establishing existing visual character, including resources and scenic vistas unique to the project area. Visual resources are determined by identifying existing landforms (e.g., topography and grading), views (e.g., scenic resources such as natural features or urban characteristics), viewing points/locations, and existing light and glare (e.g., nighttime illumination). Changes to the existing aesthetic environment that would result from implementation of the Moorpark General Plan 2050 are identified and qualitatively evaluated based on the proposed modifications to the existing setting and the viewer's sensitivity. It should be noted, however, that there are no locally designated or defined standards or methodologies for the assessment of aesthetic impacts.

5.1.3.2 IMPACT ANALYSIS

The applicable thresholds are identified in brackets after the impact statement.

Impact 5.1-1: Development in accordance with the Moorpark General Plan 2050 would not substantially alter or damage scenic vistas or resources or degrade views along a state scenic highway. [Thresholds AE-1 and AE-2]

Visual resources in the City include scenic mountain views, scenic city views, prominent scenic vistas, and scenic corridors.

- **Scenic Mountain Views.** Moorpark features scenic mountain views of the Santa Susana Mountains to the north and the Simi Hills and Santa Monica Mountains to the south. The Santa Susana Mountains are visible from all parts of the city and dominate most viewsheds to the north. The mountains frame the views of the city from the major entry points along SR-118 to the east and SR-23 to the south. The rural environment and open space areas in the far northern and western portions of Moorpark afford its residents clear views of scenic and natural resources.

- **Scenic City Views.** Roads that traverse Moorpark provide scenic views of the city, its hillsides, and environs. SR-118 runs along and near the base of the Santa Susana Mountains and provides access to Simi Valley and Los Angeles to the east. SR-23 runs along rugged terrain as it transverses Grimes Canyon and provides a commuter link from Santa Clara Valley to Moorpark. The breadth of the city is visible to motorists, and this view is particularly beautiful at night with the city lights as a backdrop and on clear days when views are unimpeded. Significant views of the city can be found from many surrounding ridges and peaks as well as from within the canyons of the surrounding mountain ranges.

- **Prominent Scenic Vistas.** Significant vistas in the city include: (1) the view north to the Santa Susana Mountains from Walnut Canyon Road and SR-23; (2) the view north to the Santa Susana Mountains from Los Angeles Avenue Road near SR-118/SR-23; (3) the views of the Arroyo Simi, which as a 19-mile westward-running creek from Simi Valley to Moorpark; (4) the views of the McCrea Wildlife Refuge to

the east from Moorpark Road; and (5) the woodland meadow landscape with various trees planted along Tierra Rejada Road.

- **Scenic Corridors.** As shown in Figure 5.1-1, there are no officially designated state scenic highways in the city. However, SR-118 is designated eligible to be a state scenic highway, according to the California Scenic Highway Mapping System (Caltrans 2019). The Moorpark General Plan 2050's Open Space, Parks and Recreation Element identifies one state-eligible scenic highways as a "scenic corridor" (see Figure 5.1-1). Land uses near SR-118 and locally designated scenic corridors shown in Figure 5.1-1 predominantly include commercial, industrial, open space, and residential.

The proposed Land Use Plan would allow for development of currently undeveloped parcels and intensification of existing land uses, including along the local scenic corridors. The Moorpark General Plan 2050 would continue to preserve open space areas and parks that provide views of scenic vistas. The commercial, industrial, and residential uses adjacent to these scenic vistas and resources would remain unchanged, preserving views of these scenic vistas and resources. Therefore, vistas and scenic resources in and surrounding the city would not be adversely impacted.

The Moorpark General Plan 2050 also includes policies related to the preservation of scenic vistas and resources in the city.

Land Use Element

- **Policy LU-7.2 Design development to respect natural setting.** Require that new development respect, integrate with, and complement the natural features of the land including conforming building massing to topographic forms, restricting grading of steep slopes and encouraging the preservation of ridgelines and significant hillsides as prominent visual features.

Open Space, Parks and Recreation Element

- **Policy OSPR-4.1 Landscape Links.** Work with Ventura County to enhance landscaped arterial entrance ways, multi-use trails, including bikeways and equestrian paths connecting to Greenbelt areas, such as Tierra Rejada, and Wildlife Corridors to create a network of aesthetically pleasing links into and around the City.

- **Policy OSPR-4.2 New Development.** Ensure that new developments contribute to, and do not diminish, the City's unique aesthetic and visual qualities.

- **Policy OSPR-4.3 Protect ridgelines.** Protect ridgelines from incompatible development that diminishes their scenic value, and ensure their conservation, preservation, and management.

- **Policy OSPR-4.4 Relationship of development to natural terrain.** Require that developments be designed to create a consistent visual relationship with the natural terrain and vegetation, and require grading to conform to the existing terrain to the extent feasible.

The existing and proposed scale and design of the city, and its existing and future land uses, complement and do not detract from the backdrop scenery of the surrounding mountains, hillsides, and rural environment. The height of the surrounding mountains ensures that they will remain a scenic backdrop to Moorpark and the surrounding communities without interference from future development accommodated by the Moorpark General Plan 2050. The development standards under the municipal code guide future development characteristics, such as height and placement of buildings and structures, setback requirements, and architectural design parameters.

Adherence to development standards in the Moorpark Municipal Code and implementation of the Moorpark General Plan 2050 policies would ensure that future development would not have a substantial adverse impact on scenic vistas or resources in the project area or along a state scenic highway.

Level of Significance Before Mitigation: Less than significant.

Impact 5.1-2: Buildout in accordance with the proposed Land Use Plan would alter the existing visual appearance of the city, but would not substantially degrade its existing visual character or quality. [Threshold AE-3]

Future development in accordance with the Moorpark General Plan 2050 would allow for new development of currently undeveloped parcels and intensification of already developed areas. Although new development would alter the visual appearance of the city, it would not degrade Moorpark's visual character or quality. Buildout under the Moorpark General Plan 2050 would occur in areas already developed and urbanized or areas that are designated for development. Areas designated as open space, parks, and agricultural lands would remain undeveloped under implementation of the Moorpark General Plan 2050. However, the Moorpark General Plan 2050 does not preclude agricultural lands from being amended in the future by a separate general plan amendment to accommodate development.

Moorpark is characterized by the diversity of its residential neighborhoods, which include rural residential neighborhoods and urban residential neighborhoods. Rural residential neighborhoods are characterized by single-family homes or cluster developments in a rural setting, and the urban residential neighborhoods are characterized by single-family homes and multifamily units. Additionally, the Moorpark Highlands Specific Plan Two includes up to 450 single-family residential lots and one multifamily neighborhood proposed for up to 102 units on property along the extension of Spring Road east of Walnut Canyon Road (SR-23). As shown in Figure 3-5, *Proposed Land Use Plan*, in Chapter 3, *Project Description*, a majority of the city's residential uses are medium density and either south of Los Angeles Avenue or in the northeast part of the city. Rural residential uses are in the northwestern part of the city. Commercial uses are concentrated along the intersections of Los Angeles Avenue with Walnut Canyon Road and Spring Road. Industrial uses are situated along the railroad parallel to Poindexter Avenue, High Street, and Princeton Avenue.

The Land Use Element of the Moorpark General Plan 2050 includes policy directives to ensure that continued investments in the City will enhance vitality, context, form, and function. Through these policies, Moorpark supports communities and districts in the city and seeks to establish and retain their unique sense of place. The Moorpark General Plan 2050 also calls for preserving the City's historic agricultural setting, historical resources, and natural topography. Therefore, implementation of the Moorpark General Plan 2050

would not introduce a substantial amount of new development or intensify development to the point that it would damage or alter the existing visual character or quality of the city.

The goals and policies in the Land Use Element are implemented through more detailed residential and nonresidential design guidelines and specifications—architectural standards, landscape palettes, and streetscape improvement plans that provide guidance for the preferred design of buildings, landscaping, streetscapes, and public spaces. For example, development under the Moorpark General Plan 2050 would be required to comply with existing regulations that help maintain the city's character, promote a sense of community, and create consistent design aesthetics across the city. Title 17, Zoning, of the Moorpark Municipal Code is the City's zoning ordinance and governs the specific development requirements for all zones and use of property in the city through the implementation of development standards that are intended to preserve visual resources and maintain the aesthetically pleasing environment. The zoning ordinance would ensure that development under the Moorpark General Plan 2050 would continue to maintain and be compatible with the city's general plan goals.

The Moorpark General Plan 2050's Land Use Element also ensures that the city's visual character is preserved—e.g., Policies LU-5.1, LU-5.2, LU-7.2, LU-11.1, LU-12.2, LU-12.3, LU-16.6, LU-17.3, and LU-19.4. The overarching goals of these policies include compatibility, cohesion, and integration of development; distinct and well-maintained neighborhoods contributing to character and identity; diverse housing that enhances livability; and high-quality architecture.

By complying with the City's existing regulations and the Moorpark General Plan 2050 policies, future developments would be built to reflect and maintain Moorpark's existing visual character and resources. Impacts would be less than significant.

Level of Significance Before Mitigation: Less than significant.

Impact 5.1-3: Future development in accordance with the Moorpark General Plan 2050 would generate additional light and glare in the city that would impact surrounding existing land uses; however, light and glare would be minimized through adherence to the City's lighting standards. [Threshold AE-4]

Sources of light and glare in the city include building lighting (interior and exterior), security lighting, sign illumination, ballfield lighting, and parking-area lighting. These sources are mostly associated with residential, commercial, and industrial uses and the larger community parks in the more developed areas of the city. Other sources of nighttime light and glare include streetlights, vehicular traffic along surrounding roadways, and ambient lighting from surrounding communities.

Future development in accordance with the Moorpark General Plan 2050 would occur in areas designated for development and would allow for development of currently undeveloped parcels and alterations, intensification, and redistribution of existing land uses, which could increase nighttime light and glare in the city. For example, conversion of underutilized or vacant areas into residential or commercial uses would introduce new sources of light (building illumination, security lighting, streetlights, etc.). However, land uses throughout the city would maintain their existing land use designations.

Sources of light and glare from new developments, residents, and employees would include lighting needed to provide nighttime street and building illumination, security lighting, traffic sign illumination, lighting in parking areas, and lighting associated with construction activities. This would likely introduce new significant sources of light and glare. However, development would be required to comply with municipal code Chapter 17.30, which provides regulation for lighting systems to maintain aesthetic value, mitigate nuisance impacts upon abutting properties, and reduce waste of energy resources. Section 17.30.050, Prohibited lighting, prohibits outdoor lighting systems installed without proper plans and permit approvals, as well as any lighting that causes glare or spillover. This would ensure that substantial light and glare does not extend substantially beyond the site where it is generated.

In addition, the Moorpark General Plan 2050's Land Use Element includes Policy LU-17.4 to minimize light and glare by ensuring that City-owned buildings, sites, and infrastructure are designed to be compatible in scale, character, and landscape with their district or neighborhood and minimize potential impacts such as traffic, noise, and lighting.

By ensuring that all future development projects comply with the municipal code and the Moorpark General Plan 2050 policy pertaining to light and glare, any potential spillover would be minimized, and impacts would be less than significant.

Level of Significance Before Mitigation: Less than significant.

5.1.4 Relevant General Plan Policies

Land Use Element

- **Policy LU-1.1 Growth respecting Moorpark's values and character.** Accommodate growth that is consistent with community values and complements the scale and character of Moorpark's residential neighborhoods, business districts, and natural environmental setting.
- **Policy LU-5.1 Development complements existing character.** Require that new development be designed to complement Moorpark's historical family-oriented small-town feel.
- **Policy LU-5.2 Integration of public spaces.** Maintain public spaces and services to create an aesthetically and functionally welcoming environment.
- **Policy LU-5.5 Compatible land uses.** Require design features that provide visual relief and separation between land uses of conflicting character.
- **Policy LU-6.1 Land Use compatibility.** Require that development is located and designed to assure compatibility among land uses
- **Policy LU-6.2 Development transitions.** Require that the scale and massing of new development in higher density locations provide appropriate transitions in building height and bulk that are sensitive to the physical and visual character of the adjoining uses.

- **Policy LU-7.2 Design development to respect natural setting.** Require that new development respect, integrate with, and complement the natural features of the land including conforming building massing to topographic forms, restricting grading of steep slopes and encouraging the preservation of ridgelines and significant hillsides as prominent visual features.

- **Policy LU-11.1 Quality neighborhoods.** Maintain the uses, character, amenities, and quality of Moorpark's residential neighborhoods, recognizing their contribution to the City's identity, economic value, and residents' quality of life.

- **Policy LU-11.5 Sustained development standards.** Preserve and enhance residential neighborhoods through enforcement of land use and property standards, ensuring that adjacent nonresidential uses are buffered from residences in harmonious and attractive ways.

- **Policy LU-12.2 Development that complements.** Require that new residential development complements the overall character of the City, establishes a sense of place, is compatible with the scale and character of the surrounding neighborhood, and ensures compatibility with important existing local community identities.

- **Policy LU-12.3 Accessory dwelling units.** Require that accessory dwelling units are located and designed to complement the scale and architectural character of the existing single family unit on a property.

- **Policy LU-12.5 Multi-family housing quality.** Require that new and renovated multi-family residences achieve a high level of architectural design and quality of life for residents, in consideration of the following principles:

  a) Consistent architectural design treatment of all elevations, including those not visible from public places

  b) Design elevations of multi-family buildings facing public streets and pedestrian ways to exhibit a high level of visual interest and distinguish entries for separate residences as feasible for security and privacy

  c) Incorporate setbacks, modulate building mass, and design multi-family buildings and projects in consideration of the development patterns of the surrounding neighborhood

- **Policy LU-14.1 Commercial compatibility with adjoining uses.** Require that new commercial uses are compatible in scale and character with adjacent commercial uses and residential neighborhoods.

- **Policy LU-15.5 Active mixed-use districts.** Require that sites and corridors integrating housing and commercial/office uses are designed to establish the character of distinct, cohesive, and pedestrian-oriented places that are linked with and walkable from adjoining residential neighborhoods. Contributing elements may include:

  a) Wide sidewalks, plazas, and courtyards along building frontages for outdoor dining and gathering

b) Pedestrian walkways connecting parking areas with buildings and public spaces that are well defined by paving materials, landscaping, lighting, and way-finding signage

c) Landscaping that is sustainable and contributes to the aesthetic and economic value of the center and provides a tree canopy reducing the heat island effect and greenhouse gas emissions

d) Buildings oriented toward the street and public spaces with parking located to the rear of the buildings, underground, or in structures

- **Policy LU-16.6 Design for compatibility.** Require that industrial uses incorporate design features, such as screen walls, landscaping and setbacks, and include height and lighting restrictions, so as to minimize adverse impacts on adjacent uses and enhance the visual characteristics of the area.

- **Policy LU-17.3 Maintenance and enhancement.** Coordinate, partner with, and encourage school and utility districts and other government and independent agencies that may be exempt from City land use control and approval to plan and improve their properties and design improvements to achieve a high level of visual and architectural quality that maintains the character of the neighborhood or district in which they are located.

- **Policy LU-17.4 Compatibility with adjoining uses.** Ensure that City-owned buildings, sites, and infrastructure are designed to be compatible in scale, character, and landscape with the district or neighborhood in which they are located, and minimize potential impacts such as traffic, noise, and lighting.

- **Policy LU-19.4 Visual character.** Strengthen the visual character of the downtown commercial core in order to attract a variety of commercial and mixed-use (commercial and housing) projects and promote the economic vitality of downtown Moorpark.

Open Space, Parks and Recreation Element

- **Policy OSPR-4.1 Landscape Links.** Work with Ventura County to enhance landscaped arterial entrance ways, multi-use trails, including bikeways and equestrian paths connecting to Greenbelt areas, such as Tierra Rejada, and Wildlife Corridors to create a network of aesthetically pleasing links into and around the City.

- **Policy OSPR-4.2 New Development.** Ensure that new developments contribute to, and do not diminish, the City's unique aesthetic and visual qualities.

- **Policy OSPR-4.3 Protect ridgelines.** Protect ridgelines from incompatible development that diminishes their scenic value, and ensure their conservation, preservation, and management.

- **Policy OSPR-4.4 Relationship of development to natural terrain.** Require that developments be designed to create a consistent visual relationship with the natural terrain and vegetation, and require grading to conform to the existing terrain to the extent feasible.

- **Policy OSPR-4.5 Underground Utilities.** Coordinate with SCE and local utilities to underground existing above-ground utility lines where feasible.
- **Policy OSPR-4.6 Rewilding Options.** Pursue rewilding opportunities that include, but are not limited to the following: the preserve, enhance and expand an integrated network of open space to support beneficial uses, such as habitat, recreation, natural resources, historic and tribal resources, water management, and aesthetics.

5.1.5 Level of Significance Before Mitigation

Upon implementation of regulatory requirements and standard conditions of approval, some impacts would be less than significant: 5.1-1, 5.1-2, and 5.1-3.

5.1.6 Mitigation Measures

No significant adverse impacts were identified, and no mitigation measures are necessary.

5.1.7 Level of Significance After Mitigation

No mitigation measures are required, and impacts would be less than significant.

5.1.8 References

California Department of Transportation (Caltrans). 2019. Scenic Highways: California State Scenic Highway. Accessed May 3, 2022. https://dot.ca.gov/programs/design/lap-landscape-architecture-and -community-livability/lap-liv-i-scenic-highways.

Moorpark, City of. 2022. Moorpark, California Municipal Code. Accessed September 6, 2022. https://library.qcode.us/lib/moorpark_ca/pub/municipal_code.

5.2 AGRICULTURE AND FORESTRY RESOURCES

This section of the Draft Environmental Impact Report (DEIR) evaluates the potential for the Moorpark General Plan 2050 (proposed project) to impact agriculture and forestry resources in the City of Moorpark. Cumulative impacts related to agriculture and forestry resources would be contiguous with the city, but also consider regional agricultural resources.

5.2.1 Environmental Setting

5.2.1.1 REGULATORY BACKGROUND

State Laws

California General Plan Law

The California Government Code (Section 65302(d)) requires the general plan to include an open space and conservation element for the conservation, development, and utilization of natural resources—including water and its hydraulic force, forests, soils, rivers and other waters, harbors, fisheries, wildlife, minerals, and other natural resources. The conservation element must consider the effect of development on natural resources that are on public lands. The element must also cover:

- The reclamation of land and waters.
- Prevention and control of the pollution of streams and other waters.
- Regulation of the use of land for the accomplishment of the conservation plan.
- Prevention, control, and correction of the erosion of soils, beaches, and shores.
- Protection of watersheds.
- Location, quantity, and quality of the rock, sand, and gravel resources.
- Waterways, flood corridors, riparian habitats, and land that may accommodate floodwater for groundwater recharge and stormwater management.

In October 2017, the state legislature passed SB 732, which authorizes a city to develop an agricultural land component of the open space element or a separate agricultural element in its general plan. For local governments that choose this option, the bill authorizes the Department of Conservation (DOC) to award grants, bond proceeds, and other assistance provided the element meets certain requirements.

Farmland Mapping and Monitoring Program

The California Natural Resources Agency is charged with restoring, protecting, and maintaining the state's natural, cultural, and historical resources. Within the agency, the DOC provides technical services and information to promote informed land use decisions and sound management of the state's natural resources.

DOC manages the Farmland Mapping and Monitoring Program, which supports agriculture throughout California by developing maps and statistical data for analyzing land use impacts to farmland. Every two years, the program publishes a field report for each county in the state. The most recent field report for Ventura County was published in 2018. The field report categorizes land by agricultural production potential, according to the following classifications.

- **Prime Farmland** has the best combination of physical and chemical features able to sustain long-term agricultural production. Prime Farmland has the soil quality, growing season, and moisture supply needed to produce sustained high yields. Land must have been used for irrigated agriculture production at some time during the four years prior to the mapping date.

- **Farmland of Statewide Importance** is similar to Prime Farmland, but with minor shortcomings, such as steeper slopes or less ability to store soil moisture. Land must have been used for irrigated agricultural production at some time during the four years prior to the mapping date.

- **Unique Farmland** consists of lesser quality soils used for the production of the state's leading agricultural crops. This land is usually irrigated, but may include nonirrigated orchards or vineyards as found in some climatic zones in California. Land must have been farmed at some time during the four years prior to the mapping date.

- **Farmland of Local Importance** includes all farmable land within the City not meeting the definitions of "prime farmland," "farmland of statewide importance," and "unique farmland." This includes land that is or has been used for irrigated pasture, dryland farming, confined livestock or dairy facilities, aquaculture, poultry facilities, and dry grazing. It also includes lands previously designated by soil characteristics as "prime farmland," "farmland of statewide importance," and "unique farmland" that has since become idle.

- **Grazing Land** is the land on which the existing vegetation is suited to the grazing of livestock.

- **Urban and Built-Up Land** is occupied by structures with a building density of at least one unit per 1.5 acres, or approximately six structures to a 10-acre parcel. Common examples include residential structures, industrial structures, commercial structures, institutional facilities, cemeteries, airports, golf courses, sanitary landfills, sewage treatment structures, and water control structures.

- **Other Land** is land not included in any other mapping category. Common examples include low density rural developments, brush timber, wetlands, and riparian areas not suitable for livestock grazing; confined livestock, poultry, or aquaculture facilities; strip mines; borrow pits; and water bodies smaller than 40 acres. Vacant and nonagricultural land surrounded on all sides by urban development and greater than 40 acres is mapped as Other land.

- **Water** is used to describe perennial water bodies with an extent of at least 40 acres.

California Land Conservation Act (Williamson Act)

The California Land Conservation Act of 1965, better known as the Williamson Act, conserves agricultural and open space lands through property tax incentives and voluntary restrictive land use contracts administered by local governments under State regulations. Private landowners voluntarily restrict their land to agricultural and compatible open space uses under minimum ten-year rolling term contracts, with counties and cities also acting voluntarily. In return, restricted parcels are assessed for property tax purposes at a rate consistent with their actual use, rather than potential market value.

Nonrenewal status is applied to Williamson Act contracts that are within the nine-year termination process, during which the annual tax assessment for the property gradually increases.

Forestland and Timberland Protection

State regulations such as the Forest Taxation Reform Act of 1976 and the Z'berg-Nejedly Forest Practice Act of 1973 (California Forest Practice Act) provide for the preservation of forest lands from encroachment by other, incompatible land uses and for oversight of the management of forest practices and forest resources.

Public Resources Code Section 12220(g)

Public Resources Code Section 12220(g) defines "forest land" for the purposes of CEQA. According to the code, "forest land" is land that can support 10-percent native tree cover of any species, including hardwoods, under natural conditions, and that allows for management of one or more forest resources, including timber, aesthetics, fish and wildlife, biodiversity, water-quality, recreation, and other public benefits.

Government Code Section 51104(g)

The California Timberland Productivity Act of 1982, like the Land Conservation Act, was passed to encourage the production of timber resources. Government Code Section 51104(g) defines "Timber," "Timberland," and "Timberland Production Zone" for the purposes of CEQA and "Timberland Preserve Zone," which may be used in city and county general plans.

- **"Timber"** means trees of any species maintained for eventual harvest for forest production purposes, whether planted or of natural growth, standing or down, on privately or publicly owned land, including Christmas trees, but does not mean nursery stock.

- **"Timberland"** means privately owned land, or land acquired for State forest purposes, which is devoted to and used for growing and harvesting timber, or for growing and harvesting timber and compatible uses, and which is capable of growing an average annual volume of wood fiber of at least 15 cubic feet per acre.

- **"Timberland Production Zone"** or **"TPZ"** means an area which has been zoned pursuant to Section 51112 or 51113 and is devoted to and used for growing and harvesting timber, or for growing and harvesting timber and compatible uses, as defined in subdivision (h). With respect to the general plans of cities and counties, "Timberland Preserve Zone" means "Timberland Production Zone."

County boards of supervisors may designate areas of timberland preserve, referred to as Timberland Production Zones, which restrict the land's use to the production of timber for an initial 10-year term in return for lower property taxes.

Regional Laws

Save Open and Agricultural Resources

Save Open and Agricultural Resources (SOAR) is a set of laws adopted by the local governments of Ventura County to control urban sprawl in the county. In Ventura County's unincorporated lands, SOAR requires the County Board of Supervisors to receive approval from voters all over the county before up-zoning unincorporated lands currently designated for agricultural, open space, or rural land uses. SOAR establishes city-urban restriction boundaries (CURB) around the perimeters of each incorporated city in Ventura County. If a city's leadership wants to expand its CURB beyond the existing limits, it must have the approval of a majority of voters in the city. Each community in Ventura County voted in 2016 to extend its participation in SOAR past the original initiative's expiration date of 2020. In Moorpark, SOAR was reextended by Measure E to continue until 2050. One of the preserve areas is the Tierra Rejada Greenbelt, which is south and southeast, outside of city limits.

To direct growth away from agricultural and open space lands, Ventura County, cities in the county, and the Local Agency Formation Commission (LAFCO) also adopted the "Guidelines for Orderly Development" in 1969 and revised them in 1996. The guidelines encourage urban development in cities whenever and wherever practical; clarify the relationship between the cities and the county with respect to urban planning; facilitate a better understanding regarding development standards and fees; and identify the appropriate governmental agency responsible for making determinations on land use requests.

5.2.1.2 EXISTING CONDITIONS

Agricultural Uses

Regional Agriculture and Farmland

Between 2014 and 2016 the County of Ventura experienced a net increase of 61 acres (118,447 acres to 118,508 acres) of Important Farmland and a net increase of 293 acres of new Urban and Built-Up land, according to the latest data available from the California DOC (DOC 2016).

Table 5.2-1, *Ventura County 2014–2016 Land Use Conversion*, presents information from the 2016 California Farmland Conversion Report summarizing farmland conversion in the county.

Table 5.2-1 Ventura County 2014–2016 Land Use Conversion

Land Use Category	Total Acreage Inventoried (2014)	Total Acreage Inventoried (2016)	Acres Lost	Acres Gained	Total Acreage Changed	Net Acreage Changed
Prime Farmland	41,143	40,976	409	242	651	-167
Farmland of Statewide Importance	33,045	32,992	191	138	329	-53
Unique Farmland	28,699	28,950	584	835	1,419	251
Farmland of Local Importance	15,560	15,590	383	413	796	30
Important Farmland Subtotal	**118,447**	**118,508**	**1,567**	**1,628**	**3,195**	**61**
Grazing Land	197,794	197,859	832	897	1,729	65
Agricultural Land Subtotal	**316,241**	**316,367**	**2,399**	**2,525**	**4,924**	**126**
Urban and Built-up Land	105,673	105,966	82	375	457	293
Other Land	130,105	129,688	792	375	1,167	-417
Water Area	3,940	3,938	2	0	2	-2
Total Area Inventoried	**555,959**	**555,959**	**3,275**	**3,275**	**6,550**	**0**

Source: DOC 2016.

Local Agriculture and Farmland

Unlike most areas of the Southern California metropolitan region, agriculture is still a sizable component of the economy in Ventura County. According to the 2017 Agricultural Census, the entire county has 1,151 farms totaling approximately 260,000 acres. Agricultural land uses in Moorpark consist of cropland, pasture, orchards and vineyards, nurseries, and ranches and occupy 28.8 acres in the city, representing 0.5 percent of its land area. These uses are primarily on the city's western edge just north of the Arroyo Simi (Moorpark 2020).

Moorpark has 28.8 acres under agricultural production. Under the current General Plan, 15.5 acres are zoned for agricultural uses. Table 5.2-2, *Existing Farmland in Moorpark*, presents information from the latest California DOC Farmland Mapping and Monitoring Program for Moorpark on farmland in Moorpark. Existing farmland in Moorpark is shown on Figure 5.2-1, *Important Farmland*. The city currently contains 772.3 acres of Important Farmland (Prime Farmland, Farmland of Statewide Importance, Unique Farmland, and Farmland of Local Importance). However, not all the agricultural resources shown in Table 5.2-2 are currently in agricultural production (DOC 2018).

Table 5.2-2 Existing Farmland in Moorpark

Land Use Category	Acres
Prime Farmland	0
Farmland of Statewide Importance	0
Unique Farmland	124.1
Farmland of Local Importance	648.2
Total Important Farmland in Moorpark	**772.3**
Grazing Land	2,113.6
Total Farmland in Moorpark	**2,885.9**

Source: DOC 2018.

CURB Boundaries in Moorpark

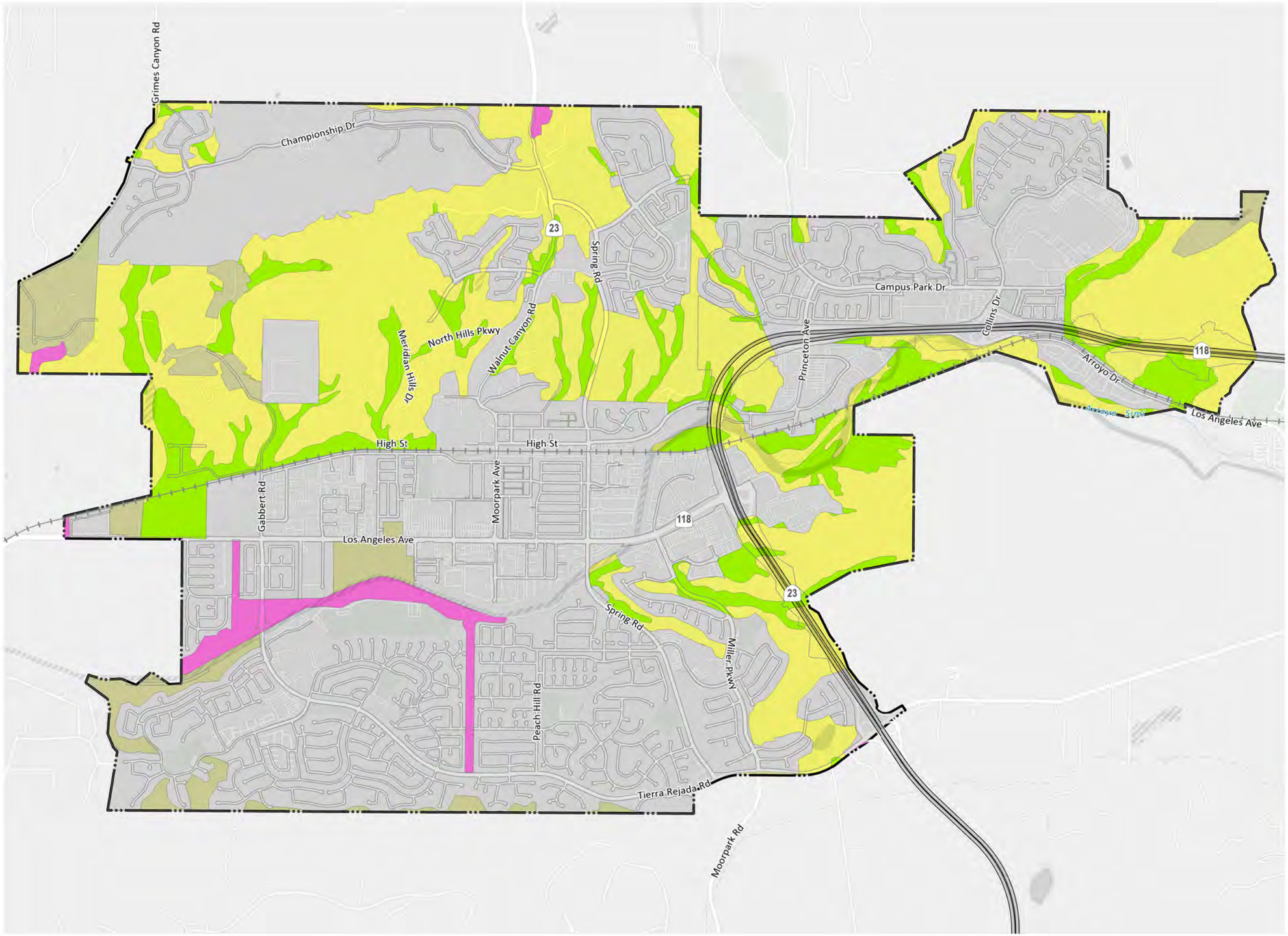
Unlike the SOAR boundary, the CURB boundaries in Moorpark are not always coterminous with its geographic boundaries. In 1998, one property on the opposite side of SR-23 from the Moorpark Marketplace was transferred to Moorpark's jurisdiction from Ventura County. Since it is intended for open space conservation and no urban growth is permitted in this area, it is not within the CURB boundary. In 2015, the City Council studied the potential annexation of a property abutting Moorpark's western boundary, though the council ultimately decided against the annexation and subsequent CURB boundary expansion. Apart from the transfer of the open space property in 1998, the CURB boundary has remained unchanged since SOAR was originally enacted (Moorpark 2020). There are no SOAR lands within Moorpark, but the CURB boundary, as defined by the City's Municipal Code, excludes one open space parcel adjacent to the Tierra Rejada Greenbelt. Figure 5.2-2, *SOAR-CURB Boundary within Moorpark*, shows the CURB boundary for the City of Moorpark.

Forest Land and Timberland

The City of Moorpark contains no forest land or timberland that could fall under the definition of forest land per California Public Resource Code Section 12220(g).

Figure 5.2-1

Important Farmland



City Boundary

Railroad

Land Use Type

- Prime Farmland
- Unique Farmland
- Farmland of Statewide Importance
- Farmland of Local Importance
- Grazing Land
- Other Land
- Urban or Built-Up Land

MADE BY MOORPARK General Plan 2050

Draft Environmental Impact Report

0 1,000 2,000 4,000 FT

Source: PlaceWorks, 2022

Date: 9/22/2022

5. Environmental Analysis
AGRICULTURE AND FORESTRY RESOURCES

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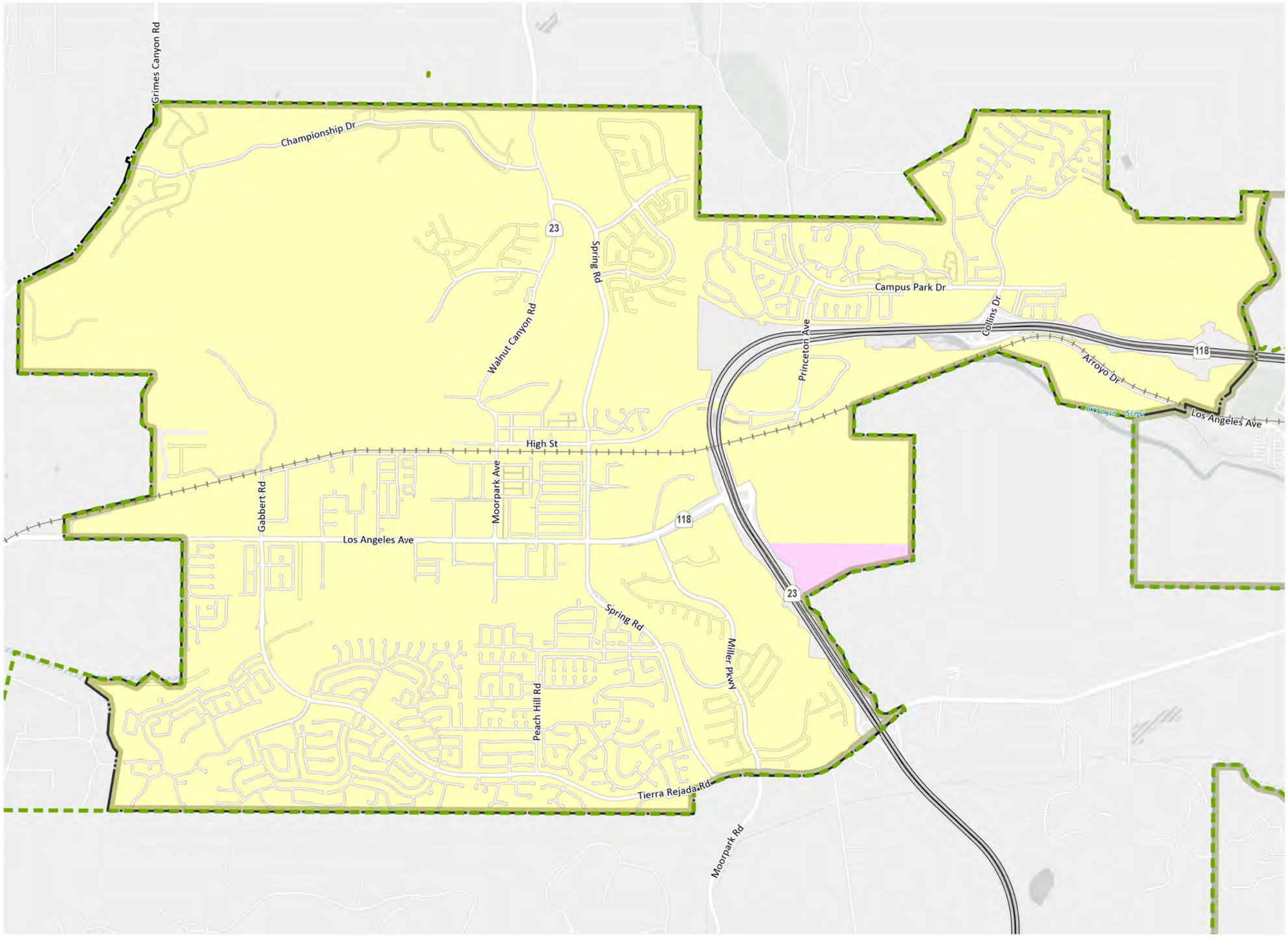
Figure 5.2-2

SOAR-CURB Boundary



City Boundary
Railroad
SOAR-CURB Boundary
Outside CURB (city data)
Within CURB (city data)
SOAR Boundary (County of Ventura data)
CURB Boundary (County of Ventura data)

MADE BY MOORPARK General Plan 2050

Draft Environmental Impact Report

0 1,000 2,000 4,000 FT

Source: PlaceWorks, 2022

Date: 11/1/2022

5. Environmental Analysis
AGRICULTURE AND FORESTRY RESOURCES

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5.2.2 Thresholds of Significance

According to Appendix G of the CEQA Guidelines, a project would normally have a significant effect on the environment if the project would:

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.

AG-2 Conflict with existing zoning for agricultural use, or a Williamson Act contract.

AG-3 Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)), timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g)).

AG-4 Result in the loss of forest land or conversion of forest land to non-forest use.

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 forest land to non-forest use.

5.2.3 Environmental Impacts

5.2.3.1 IMPACT ANALYSIS

The applicable thresholds are identified in brackets after the impact statement.

Impact 5.2-1: Implementation of the Moorpark General Plan would convert Unique Farmland and Farmland of Local Importance to nonagricultural use. [Threshold AG-1 and AG-5 (part)]

CEQA requires analysis of conversion on three categories of Important Farmland: Prime Farmland, Farmland of Statewide or Local Importance, and Unique Farmland. The city contains Farmland that would be converted to nonagricultural use through buildout of the Moorpark General Plan 2050. Though Moorpark is largely developed, pockets of agricultural land remain, predominantly in the form of grazing lands with some cropland. As detailed in Table 5.2-3, *Farmland in Moorpark at Buildout*, implementation of the Moorpark General Plan 2050 would result in land currently used for agricultural uses to be converted to other land use designations.

Table 5.2-3 Farmland in Moorpark at Buildout

Land Use Category	Existing Farmland Acreage	Remaining Farmland Acreage at Buildout[1]	Farmland Loss
Prime Farmland	0	0	0
Farmland of Statewide Importance	0	0	0
Unique Farmland	124.1	87.5	-36.6
Farmland of Local Importance	648.2	222.7	-425.5
Total Important Farmland in Moorpark	**772.3**	**310.2**	**-462.1**
Grazing Land	2,113.6	852.4	-1,261.2
Total Farmland in Moorpark	**2,885.9**	**1,162.6**	**-1,723.3**

Source: DOC 2018.
Notes:: Totals may not add to 100 percent because of rounding
1 Agricultural uses are assumed to continue on lands designated Agriculture (AG), Open Space (OS), and Floodway (FLDWY).

Of the total 124.1 acres of Unique Farmland and 648.2 acres of Farmland of Local Importance, 87.5 acres and 222.7 acres, respectively, would remain as agricultural uses with implementation of the Moorpark General Plan 2050 (DOC 2018). Buildout of the proposed project would result in the loss of 36.5 acres of Unique Farmland and 425.5 acres of Farmland of Local Importance. The proposed project would not convert Prime Farmland or Farmland of Statewide Importance to nonagricultural use. As shown in Table 5.2-3, a total of approximately 462.1 acres of Important Farmland in the city would be converted to nonagricultural uses.

However, the Moorpark General Plan 2050 includes the following policies that would encourage the preservation of Important Farmland:

Land Use Element

- **Policy LU-9.6 Urban agriculture.** Encourage and preserve land for urban agriculture in the city to ensure a long-term supply of locally produced healthy food; promote resiliency, green spaces, and healthy food access through resources such as a farmers' market; increase the number of urban agriculture sites including but not limited to: community gardens, parkway gardens, urban farms, and rooftop gardens.

Open Space, Parks, and Conservation Element

- **Policy OSPR-5.3 Urban agriculture.** Promote urban agriculture with zoning provisions that support means for production, distribution, and sale of locally grown foods, such as market gardens, farmers' markets, community markets, and farm stands, and support opportunities for agricultural tourism.

- **Policy OSPR-7.3 Carbon sequestration for working lands**. Increase opportunities to sequester carbon on agricultural land and open space.

- **Policy OSPR-7.6 Sustainable agriculture.** In coordination with agricultural organizations, improve soil conservation, reduce fertilizer use, and promote other sustainable agricultural practices that help to improve yield, maintain agricultural viability, and support adaptation to changing climate conditions.

In summary, development of the Moorpark General Plan 2050 would convert farmland that has nonagricultural land use designations to nonagricultural use. The associated loss of agricultural production would be a potentially significant impact.

Level of Significance Before Mitigation: Potentially significant impact.

Impact 5.2-2: The Moorpark General Plan 2050 would not conflict with existing zoning for agricultural use or a Williamson Act contract. [Threshold AG-2]

Under the current General Plan, 15.5 acres are designated for agricultural uses. Under the Moorpark General Plan 2050 there would continue to be 15.5 acres designated for agricultural uses. As a result, there would not be any loss of agriculturally zoned lands in the city. Agriculture would continue to be an allowed use in areas zoned for agricultural uses. Additionally, there are no lands in the city under a Williamson Act contract. Therefore, the proposed project would not conflict with the existing agricultural zoning or a Williamson Act contract, and impacts would be less than significant.

Level of Significance Before Mitigation: Less than significant.

Impact 5.2-3: The Moorpark General Plan 2050 would not conflict with existing zoning for forest land, timberland, or timberland zoned Timberland Production, or result in the loss of forest land or conversion of forest land to nonforest use. [Thresholds AG-3, AG-4, and AG-5 (part)]

There are no land use designations or zoning for forest land, timberland, or timberland zoned Timberland Production in Moorpark. Consequently, the proposed project would not conflict with existing zoning for forest land, timberland, or timberland zoned Timberland Production.

As described in Section 5.4, *Biological Resources*, there are woodlands (Eucalyptus and Oak Woodlands) in the city, but they are primarily in designated open space areas. Consequently, implementation of the proposed project would not result in loss or conversion of timberland to nonforest uses, and there would be no impact.

Level of Significance Before Mitigation: No impact.

5.2.4 Relevant General Plan Policies

The following are relevant policies of the Moorpark General Plan 2050, which may contribute to reducing potential agricultural and forestry resources impacts as a result of implementation of the proposed project.

Land Use Element

- **Policy LU-9.6: Urban agriculture.** Encourage and preserve land for urban agriculture in the city to ensure a long-term supply of locally produced healthy food; promote resiliency, green spaces, and healthy

food access through resources such as a farmers' market; increase the number of urban agriculture sites including but not limited to: community gardens, parkway gardens, urban farms, and rooftop gardens.

Open Space, Parks, and Conservation Element

- **Policy OSPR-5.3 Urban agriculture.** Promote urban agriculture with zoning provisions that support means for production, distribution, and sale of locally grown foods, such as market gardens, farmers' markets, community markets, and farm stands, and support opportunities for agricultural tourism.

Conservation Element

- **Policy COS-7.3 Carbon sequestration for working lands.** Increase opportunities to sequester carbon on agricultural land and open space.
- **Policy COS-7.6 Sustainable agriculture.** In coordination with agricultural organizations, improve soil conservation, reduce fertilizer use, and promote other sustainable agricultural practices that help to improve yield, maintain agricultural viability, and support adaptation to changing climate conditions.

5.2.5 Level of Significance Before Mitigation

Upon implementation of regulatory requirements and standard conditions of approval, the following impacts would have no impact or would be less than significant: 5.12-2 and 5.12-3.

Without mitigation, this impact would be **potentially significant**:

- **Impact 5.2-1** Implementation of the Moorpark General Plan would convert Unique Farmland and Farmland of Local Importance to nonagricultural use.

5.2.6 Mitigation Measures

Impact 5.2-1

In compliance with CEQA, "each public agency shall mitigate or avoid the significant effects on the environment of any project it carries out or approves whenever it is feasible to do so" (Public Resources Code, Section 21002.1[b]). The term "feasible" is defined in CEQA to mean "capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, social, and technological factors" (Public Resources Code, Section 21061.1). The following measures were considered and rejected.

- **Retention of On-Site Agricultural Uses.** Currently, there are approximately 462.1 acres of Important Farmland that would be converted to nonagricultural uses. Further plans to conserve agricultural land in the city would be infeasible because they would not be consistent with the City's goals for housing and jobs and because they would create islands of agricultural uses within an urban setting, potentially resulting in incompatible land uses. Thus, there are policy-based reasons for finding on-site mitigation infeasible. Additionally, the economic viability of agricultural use in Ventura County has declined as a

result of losing many of the support services associated with the agricultural industry. Ultimately, the long-term viability of agriculture in the city is limited due to the increasing land prices and values, higher water costs, higher labor costs, higher property taxes, competition from other parts of the state, and the growing urbanization of the area. These factors make the long-term, permanent use of land in the city for agricultural purposes economically infeasible.

- **Establishment of Conservation Easement or Preserves or Payment into an Agricultural Mitigation Bank.** Since the majority of the city is being developed, the agriculture allowed in conservation easements or preserves would have to be limited to types of agriculture that do not impact neighboring communities and residents, since agricultural use carries its own adverse environmental effects, such as dust, odors, pesticide use, and machinery noise. In the last century agricultural land in Ventura County diminished as development pressures in areas near urban centers, such as Moorpark, resulted in an increase in land value that makes continued agricultural use cost prohibitive. Moreover, agricultural conservation easements would not actually affect the amount of farmland permanently lost. Likewise, payment of fees into a mitigation bank would not actually avoid or reduce the conversion of farmland resulting from development under the Moorpark General Plan 2050. For these reasons, the establishment of conservation easements or preserves is not deemed feasible or effective mitigation.

- **Payment in Lieu or Transfer of Development Rights.** Transferring development rights would involve purchasing the right to develop from a currently undeveloped piece of land and transferring that right to farmland in the city. Thus, this option is also infeasible because there would still be a net loss of Farmland. Even if Farmland would be preserved elsewhere in Ventura County, the Important Farmland in the city would be developed, resulting in a net loss of Farmland. Therefore, this option would not prevent significant impacts in the city and would not be an effective CEQA mitigation measure.

5.2.7 Level of Significance After Mitigation

Impact 5.2-1

Implementation of the Moorpark General Plan 2050 would convert 462.1 acres of Farmland to nonagricultural use. While mitigation measures were considered; they would not fully mitigate the direct loss of farmlands associated with the implementation of the proposed project because there would still be a net reduction in the total amount of land suitable for agricultural use. Consequently, the associated loss of agricultural production under Impact 5.2-1 would be a **significant and unavoidable** impact.

5.2.8 References

California Department of Conservation (DOC). 2016. 2014-2016 County Conversion Tables. Appendix A of 2014–2016 Farmland Conversion Report. Farmland Mapping and Monitoring Program.

———. 2018. FMMP Data. https://www.conservation.ca.gov/dlrp/fmmp.

Moorpark, City of. 2020, December. Moorpark 2020: An Examination of the City's Existing Conditions. https://secureservercdn.net/45.40.150.109/k9a.a69.myftpupload.com/wp-content/uploads/2020/12/Moorpark-2020_ExistingConditionsReport_web.pdf.

5.3 AIR QUALITY

This section of the Draft Environmental Impact Report (DEIR) evaluates the potential for the Moorpark General Plan 2050 (proposed project) to impact air quality in a local and regional context. This evaluation is based on the methodology recommended by the Ventura County Air Pollution Control District (APCD). Criteria air pollutant emissions modeling for the proposed project is included in Appendix D of this DEIR. Transportation-sector impacts are based on trip generation and vehicle miles traveled, as provided by Iteris (see Appendix K). Cumulative impacts related to air quality are based on the regional boundaries of the South Central Coast Air Basin (SCCAB).

Terminology

- **AAQS.** Ambient Air Quality Standards
- **CES.** CalEnviroScreen. CES is a mapping tool that helps identify the California communities most affected by sources of pollution and where people are often especially vulnerable to pollution's effects.
- **Concentrations.** Refers to the amount of pollutant material per volumetric unit of air. Concentrations are measured in parts per million (ppm), parts per billion (ppb), or micrograms per cubic meter ($\mu g/m^3$).
- **Criteria Air Pollutants.** Those air pollutants specifically identified for control under the Federal Clean Air Act (currently seven—carbon monoxide, nitrogen oxides, lead, sulfur oxides, ozone, and coarse and fine particulates).
- **DPM.** Diesel particulate matter.
- **Emissions.** Refers to the actual quantity of pollutant, measured in pounds per day or tons per year.
- **ppm.** Parts per million.
- **Sensitive receptor.** Land uses that are considered more sensitive to air pollution than others due to the types of population groups or activities involved. These land uses include residential, retirement facilities, hospitals, and schools.
- **TAC.** Toxic air contaminant.
- **$\mu g/m^3$.** Micrograms per cubic meter.
- **VMT.** Vehicle miles traveled.

5.3.1 Environmental Setting

5.3.1.1 AIR POLLUTANTS OF CONCERN

Criteria Air Pollutants

The pollutants emitted into the ambient air by stationary and mobile sources are categorized as primary and/or secondary pollutants. Primary air pollutants are emitted directly from sources. Carbon monoxide (CO), volatile organic compounds (VOC), nitrogen oxides (NO_x), sulfur dioxide (SO_2), coarse inhalable particulate matter (PM_{10}), fine inhalable particulate matter ($PM_{2.5}$), and lead (Pb) are primary air pollutants. Of these, CO, SO_2, NO_2, PM_{10}, and $PM_{2.5}$ are "criteria air pollutants," which means that ambient air quality standards (AAQS) have been established for them. VOC and NO_x are criteria pollutant precursors that form secondary criteria air pollutants through chemical and photochemical reactions in the atmosphere. Ozone (O_3) and nitrogen dioxide (NO_2) are the principal secondary pollutants.

Each of the primary and secondary criteria air pollutants and its known health effects is described below.

- **Carbon Monoxide** is a colorless, odorless gas produced by incomplete combustion of carbon substances, such as gasoline or diesel fuel. CO is a primary criteria air pollutant. 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. The highest ambient CO concentrations are generally found near traffic-congested corridors and intersections. The primary adverse health effect associated with CO is interference with normal oxygen transfer to the blood, which may result in tissue oxygen deprivation. Effects from CO exposure include headaches, nausea, and death. High levels of CO in a concentrated area can result in asphyxiation (Ventura County APCD 2003; South Coast AQMD 2005; USEPA 2021).

- **Nitrogen Oxides** are a by-product of fuel combustion and contribute to the formation of ground-level O_3, PM_{10}, and $PM_{2.5}$. The two major forms of NO_X are nitric oxide (NO) and nitrogen dioxide (NO_2). NO is a colorless, odorless gas formed from atmospheric nitrogen and oxygen when combustion takes place under high temperature and/or high pressure. The principal form of NO_X produced by combustion is NO, but NO reacts quickly with oxygen to form NO_2, creating the mixture of NO and NO_2 commonly called NO_X. NO_2 is an acute irritant and more injurious than NO in equal concentrations. At atmospheric concentrations, however, NO_2 is only potentially irritating. NO_2 absorbs blue light; the result is a brownish-red cast to the atmosphere and reduced visibility. NO_2 exposure concentrations near roadways are of particular concern for susceptible individuals, including asthmatics, children, and the elderly. Current scientific evidence links short-term NO_2 exposures, ranging from 30 minutes to 24 hours, with adverse respiratory effects, including airway inflammation in healthy people and increased respiratory symptoms in people with asthma. Researchers have identified harmful effects similar to those caused by ozone, with progressive changes over four hours of exposure. Negative health effects are apparent after exposure to NO_2 levels as low as 0.11 ppm for a few minutes. This level of exposure may elicit or alter sensory responses. Higher concentrations (0.45 to 1.5 ppm) may cause impaired pulmonary function, increased incidence of acute respiratory disease, and difficult breathing for both bronchitis sufferers and healthy persons (Ventura County APCD 2003; South Coast AQMD 2005;

USEPA 2021). The major sources of NOx in Ventura County are motor vehicles and other combustion processes (Ventura County APCD 2003).

- **Sulfur Dioxide** is a colorless, pungent, irritating gas formed by the combustion of sulfurous fossil fuels. It enters the atmosphere as a result of burning high-sulfur-content fuel oils and coal and chemical processes at plants and refineries. Gasoline and natural gas have very low sulfur content and do not release significant quantities of SO_2. When sulfur dioxide forms sulfates (SO_4) in the atmosphere, together these pollutants are referred to as sulfur oxides (SO_X). Thus, SO_2 is both a primary and secondary criteria air pollutant. At sufficiently high concentrations, SO_2 may irritate the upper respiratory tract. Current scientific evidence links short-term exposures to SO_2, ranging from 5 minutes to 24 hours, with an array of adverse respiratory effects, including bronchoconstriction and increased asthma symptoms. These effects are particularly adverse for asthmatics at elevated ventilation rates (e.g., while exercising or playing) at lower concentrations and when combined with particulates, SO_2 may do greater harm by injuring lung tissue. Studies also show a connection between short-term exposure and increased visits to emergency facilities and hospital admissions for respiratory illnesses, particularly in at-risk populations such as children, the elderly, and asthmatics (Ventura County APCD 2003; South Coast AQMD 2005; USEPA 2021).

- **Suspended Particulate Matter** consists of finely divided solids or liquids such as soot, dust, aerosols, fumes, and mists. Two forms of fine particulates are now recognized and regulated. Inhalable coarse particles, or PM_{10}, include particulate matter with an aerodynamic diameter of 10 microns or less (i.e., ≤10 millionths of a meter or 0.0004 inch). Inhalable fine particles, or $PM_{2.5}$, have an aerodynamic diameter of 2.5 microns or less (i.e., ≤2.5 millionths of a meter or 0.0001 inch). Particulate discharge into the atmosphere results primarily from industrial, agricultural, construction, and transportation activities. Both PM_{10} and $PM_{2.5}$ may adversely affect the human respiratory system, especially in people who are naturally sensitive or susceptible to breathing problems. The U.S. Environmental Protection Agency's (EPA) scientific review concluded that $PM_{2.5}$, which penetrates deeply into the lungs, is more likely than PM_{10} to contribute to health effects and at far lower concentrations. These health effects include premature death in people with heart or lung disease, nonfatal heart attacks, irregular heartbeat, aggravated asthma, decreased lung function, and increased respiratory symptoms (e.g., irritation of the airways, coughing, or difficulty breathing) (South Coast AQMD 2005). Diesel particulate matter is classified by CARB as a carcinogen (CARB 1998). Particulate matter can also cause environmental effects such as visibility impairment,[1] environmental damage,[2] and aesthetic damage[3] (Ventura County APCD 2003; South Coast AQMD 2005; USEPA 2021).

- **Ozone**, or O_3, is a key ingredient of "smog" and is a gas that is formed when VOCs and NO_X, both by-products of internal combustion engine exhaust, undergo photochemical reactions in sunlight. O_3 is a

[1] $PM_{2.5}$ is the main cause of reduced visibility (haze) in parts of the United States.

[2] Particulate matter can be carried over long distances by wind and then settle on ground or water, making lakes and streams acidic; changing the nutrient balance in coastal waters and large river basins; depleting the nutrients in soil; damaging sensitive forests and farm crops; and affecting the diversity of ecosystems.

[3] Particulate matter can stain and damage stone and other materials, including culturally important objects such as statues and monuments.

secondary criteria air pollutant. O_3 concentrations are generally highest during the summer months when direct sunlight, light winds, and warm temperatures create favorable conditions for its formation. O_3 poses a health threat to those who already suffer from respiratory diseases as well as to healthy people. Breathing O_3 can trigger a variety of health problems, including chest pain, coughing, throat irritation, and congestion. It can worsen bronchitis, emphysema, and asthma. Ground-level O_3 also can reduce lung function and inflame the linings of the lungs. Repeated exposure may permanently scar lung tissue. O_3 also affects sensitive vegetation and ecosystems, including forests, parks, wildlife refuges, and wilderness areas. In particular, O_3 harms sensitive vegetation during the growing season (Ventura County APCD 2003; South Coast AQMD 2005; USEPA 2021).

- **Volatile Organic Compounds** are composed primarily of hydrogen and carbon atoms. Internal combustion associated with motor vehicle usage is the major source of VOCs. Other sources include evaporative emissions from paints and solvents, asphalt paving, and household consumer products such as aerosols (Ventura County APCD 2003; South Coast AQMD 2005). There are no AAQS for VOCs. However, because they contribute to the formation of O_3, Ventura County APCD has established a significance threshold. The health effects for ozone are described above. The major sources of ROC in Ventura County are motor vehicles, cleaning and coating operations, petroleum production and marketing operations, and solvent evaporation (Ventura County APCD 2003).

- **Lead** is a metal found naturally in the environment as well as in manufactured products. Once taken into the body, lead distributes throughout the body in the blood and accumulates in the bones. Depending on the level of exposure, lead can adversely affect the nervous system, kidney function, immune system, reproductive and developmental systems, and the cardiovascular system. Lead exposure also affects the oxygen-carrying capacity of the blood. The effects of lead most commonly encountered in current populations are neurological effects in children and cardiovascular effects in adults (e.g., high blood pressure and heart disease). Infants and young children are especially sensitive to even low levels of lead, which may contribute to behavioral problems, learning deficits, and lowered IQ (Ventura County APCD 2003; South Coast AQMD 2005; USEPA 2021). The major sources of lead emissions have historically been mobile and industrial sources. As a result of the EPA's regulatory efforts to remove lead from gasoline, emissions of lead from the transportation sector dramatically declined by 95 percent between 1980 and 1999, and levels of lead in the air decreased by 94 percent between 1980 and 1999. Today, the highest levels of lead in air are usually found near lead smelters. The major sources of lead emissions today are ore and metals processing and piston-engine aircraft operating on leaded aviation gasoline. There are no lead-emitting sources associated with the proposed project, and therefore lead is not a pollutant of concern.

Table 5.3-1, *Criteria Air Pollutant Health Effects Summary*, summarizes the potential health effects associated with the criteria air pollutants.

Table 5.3-1 Criteria Air Pollutant Health Effects Summary

Pollutant	Health Effects	Examples of Sources
Carbon Monoxide (CO)	Chest pain in heart patients Headaches, nausea Reduced mental alertness Death at very high levels	Any source that burns fuel such as cars, trucks, construction and farming equipment, and residential heaters and stoves
Ozone (O_3)	Cough, chest tightness Difficulty taking a deep breath Worsened asthma symptoms Lung inflammation	Atmospheric reaction of organic gases with nitrogen oxides in sunlight
Nitrogen Dioxide (NO_2)	Increased response to allergens Aggravation of respiratory illness	Same as carbon monoxide sources
Particulate Matter (PM_{10} & $PM_{2.5}$)	Hospitalizations for worsened heart diseases Emergency room visits for asthma Premature death	Cars and trucks (particularly diesels) Fireplaces and woodstoves Windblown dust from overlays, agriculture, and construction
Sulfur Dioxide (SO_2)	Aggravation of respiratory disease (e.g., asthma and emphysema) Reduced lung function	Combustion of sulfur-containing fossil fuels, smelting of sulfur-bearing metal ores, and industrial processes
Lead (Pb)	Behavioral and learning disabilities in children Nervous system impairment	Contaminated soil

Source: CARB 2022D; South Coast AQMD 2005, South Coast AQMD 2022.

Damage to Plants

Smog (ozone) and particulates interfere with photosynthesis and can injure leaves, reduce growth, reduce crop quality, reduce reproductive capacity, increase weed and pest infestation, and/or kill the plant, thereby reducing crop yield. Damage often occurs before visible symptoms of injury are noticed. Particulates also can interfere with beneficial biological pest control by preventing beneficial insects from preying on agricultural crop-eating pests. Damage to agricultural crops from air pollution is an economic concern in Ventura County. Many of the major agricultural crops grown in California, including Ventura County, are significantly damaged by air pollution, with from 20 to 50 percent of losses in some crop yields. The effects on native vegetation are similar to those of agricultural crops (Ventura County APCD 2003).

Damage to Materials

In addition to human health and vegetation, air pollution also damages materials such as plastics, rubber, paint, and metals. Damage includes erosion and discoloration of paint, cracking of rubber, corrosion of metals and electrical components, soiling and decay of building stone and concrete, fading, a reduction of tensile strengths of fabrics, and soiling and crumbling of nonmetallic building materials. High smog concentrations significantly shorten the lifespan of materials, which increases maintenance and replacement costs (Ventura County APCD 2003).

Toxic Air Contaminants

People exposed to toxic air pollutants (TAC) at sufficient concentrations and durations may have an increased chance of getting cancer or experiencing other serious health effects. These health effects can include damage to the immune system, as well as neurological, reproductive (e.g., reduced fertility), developmental, respiratory and other health problems (USEPA 2020). Adverse effects on people tend to be either acute (short-term) or chronic (long-term). Acute effects result from short-term, high levels of airborne toxic substances. These effects may include nausea, skin irritation, cardiopulmonary distress, and even death. Chronic effects result from long-term, low-level exposure to airborne toxic substances. Effects can range from relatively minor to life-threatening. Less serious chronic effects can include skin rashes, dry skin, coughing throat irritation, and headaches. More serious chronic effects can include lung, liver, and kidney damage; nervous system damage; miscarriages, and genetic and birth defects; and cancer. Many TACs can have both carcinogenic and noncarcinogenic health effects (Ventura County APCD 2003).

By the last update to the TAC list in December 1999, CARB had designated 244 compounds as TACs (CARB 1999). Additionally, CARB has implemented control measures for a number of compounds that pose high risks and show potential for effective control. There are no air quality standards for TACs. Instead, TAC impacts are evaluated by calculating the health risks associated with a given exposure. The majority of the estimated health risks from TACs can be attributed to relatively few compounds, the most relevant to the project being particulate matter from diesel-fueled engines.

Diesel Particulate Matter

In 1998, CARB identified diesel particulate matter (DPM) as a TAC. Previously, the individual chemical compounds in diesel exhaust were considered TACs. Almost all diesel exhaust particles are 10 microns or less in diameter. Because of their extremely small size, these particles can be inhaled and eventually trapped in the bronchial and alveolar regions of the lungs. Long-term (chronic) inhalation of DPM is likely a lung cancer risk. Short-term (i.e., acute) exposure can cause irritation and inflammatory systems and may exacerbate existing allergies and asthma systems (USEPA 2002).

Community Risk

To reduce exposure to TACs, CARB developed and approved the *Air Quality and Land Use Handbook: A Community Health Perspective* (2005) to provide guidance regarding the siting of sensitive land uses in the vicinity of freeways, distribution centers, rail yards, ports, refineries, chrome-plating facilities, dry cleaners, and gasoline-dispensing facilities. This guidance document was developed to assess compatibility and associated health risks when siting sensitive receptors near existing pollution sources. CARB's recommendations were based on a compilation of studies that evaluated data on the adverse health effects from proximity to air pollution sources. The key observation in these studies was that proximity substantially increases exposure and the potential for adverse health effects. Three carcinogenic TACs constitute the majority of the known health risks from motor vehicle traffic—DPM from trucks and benzene and 1,3 butadiene from passenger vehicles. CARB recommendations are based on data that show that localized air pollution exposures can be reduced by as much as 80 percent by following CARB minimum distance separations.

In 2017, CARB provided a supplemental technical advisory to the handbook for near-roadway air pollution exposure, "Strategies to Reduce Air Pollution Exposure Near High-Volume Roadways" (CARB 2017a). Strategies include practices and technologies that reduce traffic emissions, increase dispersion of traffic pollution (or the dilution of pollution in the air), or remove pollution from the air.

San Joaquin Valley Fever

San Joaquin Valley Fever (formally known as Coccidioidomycosis) is an infectious disease caused by the fungus *Coccidioides immitis*. San Joaquin Valley Fever is also known as Valley Fever, Desert Fever, or Cocci. The infection is caused by inhalation of spores that have become airborne when dry, dusty soil or dirt is disturbed by wind, construction, farming, or other activities. The Valley Fever fungus tends to be found at the base of hillsides, in virgin, undisturbed soil. It usually grows in the top few inches of soil, but can grow down to 12 inches. The fungus does not survive well in highly populated areas because there is not usually enough undisturbed soil for it to grow. Additionally, the fungus is not likely to be found in soil that has been or is being cultivated and fertilized. This is because man-made fertilizers, such as ammonium sulfate, enhance the growth of the natural microbial competitors of the Valley Fever fungus. Infection is most frequent during summers that follow a rainy winter or spring, especially after wind and dust storms. In Ventura County, the Valley Fever fungus is most prevalent in the county's dry, inland regions (SJVAPCD 2003).

In its primary form, symptoms appear as a mild upper respiratory infection, acute bronchitis, or pneumonia. The most common symptoms are fatigue, cough, chest pain, fever, rash, headache, and joint aches, although 60 percent of people infected are asymptomatic and do not seek medical attention. In the remaining 40 percent, symptoms range from mild to severe. A small percentage, less than one percent, die as a result of the disease. The incubation period for the primary infection is from one to four weeks. Occasionally, a progressive form of Valley Fever develops from the primary form and may appear after a few weeks, months, or even years. In this progressive form, Valley Fever may cause a chronic infection of many organs, including the skin, lymph glands, spleen, liver, bones, kidneys, and brain. Individuals most vulnerable to Valley Fever are agricultural workers, construction and road workers, and archeologists, because they are exposed to the soil where the fungus might be just below the surface. Many infections, however, occur in persons without occupational exposure. Of those without an occupational risk of contracting the disease, the most susceptible are those with suppressed immune systems due to such conditions as organ transplants, HIV infection, Hodgkin's disease, diabetes, and pregnancy (3rd trimester). Domestic animals, especially dogs, are also susceptible to Valley Fever (SJVAPCD 2003).

Below are factors that may indicate the presence or a project's potential to exacerbate Valley Fever impacts:

- Disturbance of the topsoil of undeveloped land (to a depth of about 12 inches).
- Dry, alkaline, sandy soils.
- Virgin, undisturbed, nonurban areas.
- Windy areas.

- Archaeological resources probable or known to exist in the area (Native American midden sites).
- Special events (fairs, concerts) and motorized activities (motocross track, all-terrain vehicle activities) on unvegetated soil (non-grass).
- Nonnative population (i.e., out-of-area construction workers). (Ventura County APCD 2003)

5.3.1.2 REGULATORY BACKGROUND

Ambient Air Quality Standards (AAQS) have been adopted at the state and federal levels for criteria air pollutants. In addition, both the state and federal government regulate the release of TACs. Moorpark is in the SCCAB and is subject to the rules and regulations imposed by the Ventura County APCD as well as the California AAQS adopted by CARB and National AAQS adopted by the EPA. Federal, state, regional, and local laws, regulations, plans, or guidelines that are potentially applicable to the proposed project are summarized in this section.

Federal and State

Ambient Air Quality Standards

The Clean Air Act was passed in 1963 by the US Congress and has been amended several times. The 1970 Clean Air Act amendments strengthened previous legislation and laid the foundation for the regulatory scheme of the 1970s and 1980s. In 1977, Congress again added several provisions, including nonattainment requirements for areas not meeting National AAQS and the Prevention of Significant Deterioration program. The 1990 amendments represent the latest in a series of federal efforts to regulate the protection of air quality in the United States. The Clean Air Act allows states to adopt more stringent standards or to include other pollution species. The California Clean Air Act, signed into law in 1988, requires all areas of the state to achieve and maintain the California AAQS by the earliest practical date. The California AAQS tend to be more restrictive than the National AAQS.

The National and California AAQS are the levels of air quality considered to provide a margin of safety in the protection of the public health and welfare. They are designed to protect "sensitive receptors" most susceptible to further respiratory distress, such as asthmatics, the elderly, very young children, people already weakened by other disease or illness, and persons engaged in strenuous work or exercise. Healthy adults can tolerate occasional exposure to air pollutant concentrations considerably above these minimum standards before adverse effects are observed.

Both California and the federal government have established health-based AAQS for seven air pollutants, which are shown in Table 5.3-2 *Ambient Air Quality Standards for Criteria Air Pollutants*. These pollutants are ozone (O_3), nitrogen dioxide (NO_2), carbon monoxide (CO), sulfur dioxide (SO_2), coarse inhalable particulate matter (PM_{10}), fine inhalable particulate matter ($PM_{2.5}$), and lead (Pb). In addition, the state has set standards for sulfates, hydrogen sulfide, vinyl chloride, and visibility-reducing particles. These standards are designed to protect the health and welfare of the populace with a reasonable margin of safety.

Table 5.3-2 Ambient Air Quality Standards for Criteria Air Pollutants

Pollutant	Averaging Time	California Standard[1]	Federal Primary Standard[2]	Major Pollutant Sources
Ozone (O_3)[3]	1 hour	0.09 ppm	*	Motor vehicles, paints, coatings, and solvents.
	8 hours	0.070 ppm	0.070 ppm	
Carbon Monoxide (CO)	1 hour	20 ppm	35 ppm	Internal combustion engines, primarily gasoline-powered motor vehicles.
	8 hours	9.0 ppm	9 ppm	
Nitrogen Dioxide (NO_2)	Annual Arithmetic Mean	0.030 ppm	0.053 ppm	Motor vehicles, petroleum-refining operations, industrial sources, aircraft, ships, and railroads.
	1 hour	0.18 ppm	0.100 ppm	
Sulfur Dioxide (SO_2)	Annual Arithmetic Mean	*	0.030 ppm	Fuel combustion, chemical plants, sulfur recovery plants, and metal processing.
	1 hour	0.25 ppm	0.075 ppm	
	24 hours	0.04 ppm	0.14 ppm	
Respirable Coarse Particulate Matter (PM_{10})	Annual Arithmetic Mean	20 µg/m^3	*	Dust and fume-producing construction, industrial, and agricultural operations, combustion, atmospheric photochemical reactions, and natural activities (e.g., wind-raised dust and ocean sprays).
	24 hours	50 µg/m^3	150 µg/m^3	
Respirable Fine Particulate Matter ($PM_{2.5}$)[4]	Annual Arithmetic Mean	12 µg/m^3	12 µg/m^3	Dust and fume-producing construction, industrial, and agricultural operations, combustion, atmospheric photochemical reactions, and natural activities (e.g., wind-raised dust and ocean sprays).
	24 hours	*	35 µg/m^3	
Lead (Pb)	30-Day Average	1.5 µg/m^3	*	Present source: lead smelters, battery manufacturing & recycling facilities. Past source: combustion of leaded gasoline.
	Calendar Quarter	*	1.5 µg/m^3	
	Rolling 3-Month Average	*	0.15 µg/m^3	
Sulfates (SO_4)[5]	24 hours	25 µg/m^3	*	Industrial processes.
Visibility Reducing Particles	8 hours	ExCo =0.23/km visibility of 10≥ miles	No Federal Standard	Visibility-reducing particles consist of suspended particulate matter, which is a complex mixture of tiny particles that consists of dry solid fragments, solid cores with liquid coatings, and small droplets of liquid. These particles vary greatly in shape, size and chemical composition, and can be made up of many different materials such as metals, soot, soil, dust, and salt.

Table 5.3-2 Ambient Air Quality Standards for Criteria Air Pollutants

Pollutant	Averaging Time	California Standard[1]	Federal Primary Standard[2]	Major Pollutant Sources
Hydrogen Sulfide	1 hour	0.03 ppm	No Federal Standard	Hydrogen sulfide (H_2S) is a colorless gas with the odor of rotten eggs. It is formed during bacterial decomposition of sulfur-containing organic substances. Also, it can be present in sewer gas and some natural gas, and can be emitted as the result of geothermal energy exploitation.
Vinyl Chloride	24 hours	0.01 ppm	No Federal Standard	Vinyl chloride (chloroethene), a chlorinated hydrocarbon, is a colorless gas with a mild, sweet odor. Most vinyl chloride is used to make polyvinyl chloride (PVC) plastic and vinyl products. Vinyl chloride has been detected near landfills, sewage plants, and hazardous waste sites, due to microbial breakdown of chlorinated solvents.

Source: CARB 2016.
Notes: ppm: parts per million; μg/m^3: micrograms per cubic meter
* Standard has not been established for this pollutant/duration by this entity.
1 California standards for O_3, CO (except 8-hour Lake Tahoe), SO_2 (1 and 24 hour), NO_2, and particulate matter (PM_{10}, $PM_{2.5}$, and visibility reducing particles), are values that are not to be exceeded. All others are not to be equaled or exceeded. California ambient air quality standards are listed in the Table of Standards in Section 70200 of Title 17 of the California Code of Regulations.
2 National standards (other than O_3, PM, and those based on annual arithmetic mean) are not to be exceeded more than once a year. The O_3 standard is attained when the fourth highest 8-hour concentration measured at each site in a year, averaged over three years, is equal to or less than the standard. For PM_{10}, the 24-hour standard is attained when the expected number of days per calendar year with a 24-hour average concentration above 150 μg/m^3 is equal to or less than one. For $PM_{2.5}$, the 24-hour standard is attained when 98 percent of the daily concentrations, averaged over three years, are equal to or less than the standard.
3 On October 1, 2015, the national 8-hour ozone primary and secondary standards were lowered from 0.075 to 0.070 ppm.
4 On December 14, 2012, the national annual $PM_{2.5}$ primary standard was lowered from 15 μg/m^3 to 12.0 μg/m^3. The existing national 24-hour $PM_{2.5}$ standards (primary and secondary) were retained at 35 μg/m^3, as was the annual secondary standard of 15 μg/m^3. The existing 24-hour PM_{10} standards (primary and secondary) of 150 μg/m^3 also were retained. The form of the annual primary and secondary standards is the annual mean, averaged over 3 years.
5 On June 2, 2010, a new 1-hour SO_2 standard was established and the existing 24-hour and annual primary standards were revoked. The 1-hour national standard is in units of parts per billion (ppb). California standards are in units of parts per million (ppm). To directly compare the 1-hour national standard to the California standard the units can be converted to ppm. In this case, the national standard of 75 ppb is identical to 0.075 ppm.

California has also adopted a host of other regulations that reduce criteria pollutant emissions:

- **AB 1493: Pavley Fuel Efficiency Standards.** Pavley I is a clean-car standard that reduces GHG emissions from new passenger vehicles (light-duty auto to medium-duty vehicles) from 2009 through 2016. In January 2012, CARB approved the Advanced Clean Cars program (formerly known as Pavley II) for model years 2017 through 2025. In August 2022, CARB approved the new Advanced Clean Cars II standards that will ensure all new passenger cars, trucks and SUVs sold in the state will be zero-emitting by 2035 (CARB 2022e). The Advanced Clean Cars II standards will amend the Zero-Emission Vehicle Regulation to require an increase in zero-emission vehicles and amends the Low-Emission Vehicle Regulations to include more stringent standards for gasoline cars and heavier passenger trucks to continue to reduce smog-forming emissions.

- **SB 1078 and SB 107: Renewables Portfolio Standards.** A major component of California's Renewable Energy Program is the renewables portfolio standard (RPS) established under Senate Bills 1078 (Sher) and 107 (Simitian). Under the RPS, certain retail sellers of electricity were required to increase the

amount of renewable energy each year by at least 1 percent in order to reach at least 20 percent by December 30, 2010.

- **California Code of Regulations (CCR), Title 20: Appliance Energy Efficiency Standards.** The 2006 Appliance Efficiency Regulations (20 CCR Sections 1601–1608) were adopted by the California Energy Commission on October 11, 2006, and approved by the California Office of Administrative Law on December 14, 2006. The regulations include standards for both federally regulated appliances and non–federally regulated appliances.

- **24 CCR, Part 6: Building and Energy Efficiency Standards.** Energy conservation standards for new residential and nonresidential buildings adopted by the California Energy Resources Conservation and Development Commission (now the California Energy Commission) in June 1977.

- **24 CCR, Part 11: Green Building Standards Code.** Establishes planning and design standards for sustainable site development, energy efficiency (in excess of the California Energy Code requirements), water conservation, material conservation, and internal air contaminants.[4]

Tanner Air Toxics Act and Air Toxics Hot Spot Information and Assessment Act

Public exposure to TACs is a significant environmental health issue in California. In 1983, the California legislature enacted a program to identify the health effects of TACs and reduce exposure to them. The California Health and Safety Code defines a TAC as "an air pollutant which may cause or contribute to an increase in mortality or in serious illness, or which may pose a present or potential hazard to human health" (17 CCR Section 93000). A substance that is listed as a hazardous air pollutant pursuant to Section 112(b) of the federal Clean Air Act (42 US Code Section 7412[b]) is a toxic air contaminant. Under state law, the California Environmental Protection Agency, acting through CARB, is authorized to identify a substance as a TAC if it is an air pollutant that may cause or contribute to an increase in mortality or serious illness, or may pose a present or potential hazard to human health.

California regulates TACs primarily through AB 1807 (Tanner Air Toxics Act) and AB 2588 (Air Toxics "Hot Spot" Information and Assessment Act of 1987). The Tanner Air Toxics Act set up a formal procedure for CARB to designate substances as TACs. Once a TAC is identified, CARB adopts an "airborne toxics control measure" for sources that emit that TAC. If there is a safe threshold for a substance (i.e., a point below which there is no toxic effect), the control measure must reduce exposure to below that threshold. If there is no safe threshold, the measure must incorporate "toxics best available control technology" to minimize emissions. To date, CARB has established formal control measures for 11 TACs that are identified as having no safe threshold.

Under AB 2588, TAC emissions from individual facilities are quantified and prioritized by the air quality management district or air pollution control district. High priority facilities are required to perform a health risk assessment, and if specific thresholds are exceeded, are required to communicate the results to the public through notices and public meetings.

[4] The green building standards became mandatory in the 2010 edition of the code.

CARB has promulgated the following specific rules to limit TAC emissions:

- **13 CCR Chapter 10 Section 2485: Airborne Toxic Control Measure to Limit Diesel-Fueled Commercial Motor Vehicle Idling.** Generally restricts on-road diesel-powered commercial motor vehicles with a gross vehicle weight rating of greater than 10,000 pounds from idling more than five minutes.
- **13 CCR Chapter 10 Section 2480: Airborne Toxic Control Measure to Limit School Bus Idling and Idling at Schools.** Generally restricts a school bus or transit bus from idling for more than five minutes when within 100 feet of a school.
- **13 CCR Section 2477 and Article 8: Airborne Toxic Control Measure for In-Use Diesel-Fueled Transport Refrigeration Units (TRU) and TRU Generator Sets and Facilities Where TRUs Operate.** Regulations established to control emissions associated with diesel-powered TRUs.

Regional

The State is divided into air districts called air pollution control districts or air quality management districts. These agencies are county or regional governing authorities that have primary responsibility for controlling air pollution from stationary sources. CARB and local air districts are also responsible for developing clean air plans to demonstrate how and when California will attain AAQS established under both the federal and California Clean Air Acts. For the areas in California that have not attained air quality standards, CARB works with air districts to develop and implement state and local attainment plans. In general, attainment plans contain a discussion of ambient air quality data and trends; a baseline emissions inventory; future year projections of emissions that account for growth projections and already adopted control measures; a comprehensive control strategy of additional measures needed to reach attainment; an attainment demonstration, which generally involves complex modeling; and contingency measures. Plans may also include interim milestones for progress toward attainment. The SCCAB is managed by the Ventura County APCD.

Air Quality Management Planning

Ventura County APCD is the agency responsible for improving air quality in the SCCAB and ensuring that the National and California AAQS are attained and maintained. Ventura County APCD is responsible for preparing the air quality management plan (AQMP) for the SCCAB in coordination with the Southern California Association of Governments (SCAG).

2022 AQMP

Ventura County APCD plans to update the 2016 Ventura County Air Quality Management Plan (AQMP) on December 2022, which would present Ventura County's strategy to attain the 2015 federal 8-hour ozone standard of 70 parts per billion (ppb) as required by the federal CAA Amendments of 1990 and applicable EPA clean air regulations. This is the only federal clean air standard Ventura County would not meet by the compliance deadline of August 3, 2027. Photochemical air quality modeling indicates that Ventura County

will attain the 2015 federal 8-hour ozone standard by 2026 using local, state, and federal clean air programs. Additionally, the EPA determined that Ventura County had attained the 2008 federal 8-hour ozone standard by the 2016 AQMP's attainment date. Overall, the draft 2022 AQMP will provide an update emissions inventory, local and state air pollutant control measures, new emission forecasts and projections, a new federal conformity budget for transportation projects, and demonstration that Ventura County will attain the federal 8-hour ozone standard (Ventura County APCD 2022).

Ventura County APCD Rules and Regulations

All projects are subject to Ventura County APCD rules and regulations in effect at the time of activity, including:

- **Regulation II, Permits.** This regulation includes permits for operating and construction and New Source Review requirements. New Source Require requirements of this regulation under Rule 26 are applicable to new, replacement, modified, or relocated equipment/sources.

- **Regulation IV, Rule 51, Nuisance**. This rule is intended to prevent the discharge of pollutant emissions from an emissions source that results in a public nuisance. Specifically, this rule prohibits any person from discharging quantities of air contaminants or other material from any source such that it would result in an injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public. Additionally, the discharge of air contaminants would also be prohibited where it would endanger the comfort, repose, health, or safety of any number of persons or the public, or that cause, or have a natural tendency to cause, injury or damage to business or property. This rule does not apply to odors emanating from agricultural operations necessary for the growing of crops or the raising of fowl or animals.

- **Regulation IV, Rule 55, Fugitive Dust**. This rule is intended to reduce the amount of particulate matter entrained in the ambient air as a result of anthropogenic (human-made) fugitive dust sources by requiring actions to prevent, reduce, or mitigate fugitive dust emissions. Rule 55 applies to any activity or human-made condition capable of generating fugitive dust and requires best available control measures to be applied to earth moving and grading activities.

- **Regulation IV, Rule 62.7, Asbestos: Demolition and Renovation**. The purpose of this rule is to specify work practice requirements to limit asbestos emissions from building demolition and renovation activities, including the removal and associated disturbance of asbestos-containing materials. The requirements for demolition and renovation activities include asbestos surveying; notification, removal procedures and time schedules; handling and cleanup procedures; and storage, disposal, and landfilling requirements for asbestos-containing waste materials. All operators are required to maintain records, including waste shipment records, and are required to use appropriate warning labels, signs, and markings.

- **Regulation IV, Rule 74.2, Architectural Coatings**. This rule serves to limit the VOC content of architectural coatings used on projects in Ventura County. Any person who supplies, sells, offers for sale, or manufactures any architectural coating for use on projects in the Ventura County must comply with the current VOC standards set in this rule.

- **Regulation IV, Rule 74.25, Restaurant Cooking Operations**. This rule applies to restaurant owners and operators who operate conveyorized char broilers. Under this rule, char-broiler emissions of VOC and PM are required to be reduced by at least 80 percent using an emissions control device.
- **Regulation IV, Rule 74.29, Soil Decontamination Operations**. This rule applies to projects sites that require remediation to remove gasoline, diesel fuel, or jet fuel, including underground fuel storage tanks. Under this rule, contaminated soils that are being removed are required to be treated with a vapor suppressant or covered to minimize emissions of ROG (VOC). Soil vapor extraction, bioremediation, and bioventing of soils is also covered under this rule.

AB 617, Community Air Protection Program

AB 617 (C. Garcia, Chapter 136, Statutes of 2017) requires local air districts to monitor and implement air pollution control strategies that reduce localized air pollution in communities that bear the greatest burdens. In response to AB 617, CARB has established the Community Air Protection Program.

Air districts are required to host workshops to help identify communities that are disproportionately affected by poor air quality. Once the criteria have been set for identifying the highest priority locations and the communities have been selected, new community monitoring systems will be installed to track and monitor community-specific air pollution goals. In 2018 CARB prepared an air monitoring plan (Community Air Protection Blueprint) that evaluates the availability and effectiveness of air monitoring technologies and existing community air monitoring networks. Under AB 617, the Blueprint is required to be updated every five years.

Under AB 617, CARB is also required to prepare a statewide strategy to reduce TACs and criteria pollutants in impacted communities; provide a statewide clearinghouse for best available retrofit control technology; adopt new rules requiring the latest best available retrofit control technology for all criteria pollutants for which an area has not achieved attainment of California AAQS; and provide uniform, statewide reporting of emissions inventories. Air districts are required to adopt a community emissions reduction program to achieve reductions for the communities impacted by air pollution that CARB identifies.

5.3.1.3 EXISTING CONDITIONS

South Central Coast Air Basin

Ventura County is in the SCCAB, which comprises Ventura County, Santa Barbara County, and San Luis Obispo County. Ventura County often exhibits weak vertical and horizontal dispersion characteristics, which limit the dispersion of emissions and cause increased ambient air pollutant levels. Persistent temperature inversions prevent vertical dispersion. An inversion acts as a "ceiling" that prevents pollutants from rising and dispersing. Mountain ranges act as "walls" that inhibit horizontal dispersion of air pollutants (Ventura County APCD 2003).

The diurnal land/sea breeze pattern common in Ventura County recirculates air contaminants. Air pollutants are pushed toward the ocean during the early morning by the land breeze, and to the east during the

afternoon by the sea breeze. This creates a "sloshing" effect, causing pollutants to remain in the area for several days. Residual emissions from previous days accumulate and chemically react with new emissions in the presence of sunlight, thereby increasing ambient air pollutant levels. This pollutant "sloshing" effect happens predominantly from May through October ("smog" season). Air temperatures are usually higher and sunlight more intense during the smog season. This explains why Ventura County experiences the most exceedances of the state and federal ozone standards during this six-month period (Ventura County APCD 2003).

SCCAB Nonattainment Areas

The AQMP provides the framework for air quality basins to achieve attainment of the state and federal ambient air quality standards through the State Implementation Plan. Areas are classified as attainment or nonattainment areas for particular pollutants depending on whether they meet the ambient air quality standards. Severity classifications for ozone nonattainment range from marginal, moderate, and serious to severe and extreme.

- ***Unclassified.*** A pollutant is designated unclassified if the data are incomplete and do not support a designation of attainment or nonattainment.
- ***Attainment.*** A pollutant is in attainment if the AAQS for that pollutant was not violated at any site in the area during a three-year period.
- ***Nonattainment.*** A pollutant is in nonattainment if there was at least one violation of an AAQS for that pollutant in the area.
- ***Nonattainment/Transitional.*** A subcategory of the nonattainment designation. An area is designated nonattainment/transitional to signify that the area is close to attaining the AAQS for that pollutant.

The attainment status for the SCCAB is shown in Table 5.3-3, *Attainment Status of Criteria Air Pollutants in the South Central Coast Air Basin*.

Table 5.3-3 Attainment Status of Criteria Air Pollutants in the South Central Coast Air Basin

Pollutant	State	Federal[1]
Ozone – 1-hour	Nonattainment	Rescinded
Ozone – 8-hour	Nonattainment	Serious Nonattainment
PM_{10}	Nonattainment	Unclassified/Attainment
$PM_{2.5}$	Attainment	Unclassified/Attainment
CO	Attainment	Unclassified/Attainment
NO_2	Attainment	Unclassified/Attainment
SO_2	Attainment	Unclassified/Attainment
Lead	Attainment	Unclassified/Attainment
All others	Unclassified/Attainment	Unclassified/Attainment

Source: CARB 2022a.
[1] Federal Designations current as of August 19, 2022.

Existing Ambient Air Quality

Existing levels of ambient air quality and historical trends and projections in the vicinity of Moorpark are best documented by measurements taken by the Ventura County APCD. The air quality monitoring station closest to Moorpark is the Simi Valley-Cochran Street Monitoring Station. Data from this station include O_3, PM_{10}, $PM_{2.5}$, and NO_2 and are summarized in Table 5.3-4, *Ambient Air Quality Monitoring Summary*. The data show that the area regularly exceeds the state one-hour and state and federal eight-hour O_3 standards within the last five recorded years. Additionally, the area has regularly exceeded the state PM_{10} standards.

Table 5.3-4 Ambient Air Quality Monitoring Summary

Pollutant/Standard	Number of Days Thresholds Were Exceeded and Maximum Levels[1, 2]				
	2017	2018	2019	2020	2021
Ozone (O_3)					
State 1-Hour ≥ 0.09 ppm (days exceed threshold)	3	2	0	5	0
State/Federal 8-Hour > 0.070 ppm (days exceed threshold)	20	14	7	22	8
Max. 1-Hour Conc. (ppm)	0.103	0.101	0.089	0.108	0.090
Max. 8-Hour Conc. (ppm)	0.094	0.092	0.078	0.095	0.077
Nitrogen Dioxide (NO_2)					
State 1-Hour ≥ 0.18 ppm (days exceed threshold)	0	0	0	0	0
Max. 1-Hour Conc. (ppm)	0.046	0.043	0.045	0.042	0.035
Coarse Particulates (PM_{10})					
State 24-Hour > 50 µg/m^3 (days exceed threshold)	9	6	4	6	3
Federal 24-Hour > 150 µg/m^3 (days exceed threshold)	0	0	0	0	0
Max. 24-Hour Conc. (µg/m^3)[2]	154.3	110.5	127.9	90.5	103.7
Fine Particulates ($PM_{2.5}$)					
Federal 24-Hour > 35 µg/m^3 (days exceed threshold)	0	0	0	0	0
Max. 24-Hour Conc. (µg/m^3)	31.3	29.6	19.4	34.9	32.9

Source: CARB 2022c.
Notes: ppm = parts per million; ppb = parts per billion; µg/m3 = micrograms per cubic meter; * = Data not available
1 Data for O_3, NO_2, PM_{10} and $PM_{2.5}$ obtained from the Simi Valley-Cochran Street Monitoring Station
2 Data includes exceptional events (e.g., wildfire)

Existing Emissions

The city consists of commercial, retail, industrial, and institutional land uses and single- and multifamily residences. These uses currently generate criteria air pollutant emissions from natural gas use for energy, heating, and cooking; vehicle trips associated with each land use; and area sources such as landscaping equipment and consumer cleaning products.[5] Table 5.3-5, *City of Moorpark Criteria Air Pollutant Emissions Inventory*, shows the average daily emissions inventory currently associated with the existing land uses in the city. The inventory also includes emissions from off-road construction equipment.

[5] Emissions from permitted sources are excluded from the existing emissions inventory because the reductions associated with the Industrial sector are regulated separately by South Coast AQMD and are not under the jurisdiction of the City of Moorpark.

Table 5.3-5 City of Moorpark Criteria Air Pollutant Emissions Inventory

Sector	Existing Criteria Air Pollutant Emissions (pounds per day)					
	VOC	NO_X	CO	SO_2	PM_{10}	$PM_{2.5}$
Transportation[1]	25	222	1,046	4	25	10
Energy[2]	23	171	84	1	14	14
Area –Off-Road Equipment[3]	121	71	2,691	<1	3	2
Area – Consumer Products[4]	427	–	–	–	–	–
Total	596	463	3,821	5	42	26

1 EMFAC2021 Version 1.0.2. Based on daily VMT provided by Iteris (see Appendix D).
2 Based on natural gas use provided by SoCalGas.
3 OFFROAD2021 V.1.0.3.
4 Based on CalEEMod 2022 User's Guide methodology to calculate VOC emissions from use of household consumer cleaning products.

Sensitive Receptors

Some land uses are considered more sensitive to air pollution (i.e., toxic air contaminants) than others due to the types of population groups or activities involved. Sensitive population groups include children, the elderly, the acutely ill, and the chronically ill, especially those with cardiorespiratory diseases.

Residential areas are also considered sensitive to air pollution because residents (including children and the elderly) tend to be at home for extended periods of time, resulting in sustained exposure to any pollutants present. Other sensitive receptors include retirement facilities, hospitals, and schools. Recreational land uses are considered moderately sensitive to air pollution. Although exposure periods are generally short, exercise places a high demand on respiratory functions, which can be impaired by air pollution. In addition, noticeable air pollution can detract from the enjoyment of recreation. Industrial, commercial, retail, and office areas are considered the least sensitive to air pollution. Exposure periods are relatively short and intermittent, because the majority of the workers tend to stay indoors most of the time. In addition, the workforce is generally the healthiest segment of the population.

Placement of New Sensitive Receptors

Because placement of sensitive land uses falls outside CARB jurisdiction, CARB developed and approved the *Air Quality and Land Use Handbook: A Community Health Perspective* (2005) to address the siting of sensitive land uses in the vicinity of freeways, distribution centers, rail yards, ports, refineries, chrome-plating facilities, dry cleaners, and gasoline-dispensing facilities. This guidance document was developed to assess compatibility and associated health risks when placing sensitive receptors near existing pollution sources.

CARB's recommendations on the siting of new sensitive land uses are identified in Table 5.3-6, *CARB Recommendations for Siting New Sensitive Land Uses*. They were based on a compilation of recent studies that evaluated data on the adverse health effects ensuing from proximity to air pollution sources. The key observation in these studies is that proximity to air pollution sources substantially increases both exposure and the potential for adverse health effects. There are three carcinogenic TACs that constitute the majority of the known health risks from motor vehicle traffic: DPM from trucks and benzene and 1,3-butadiene from passenger vehicles.

Table 5.3-6 CARB Recommendations for Siting New Sensitive Land Uses

Source/Category	Advisory Recommendations
Freeways and High-Traffic Roads	Avoid siting new sensitive land uses within 500 feet of a freeway, urban roads with 100,000 vehicles per day, or rural roads with 50,000 vehicles per day.
Distribution Centers	Avoid siting new sensitive land uses within 1,000 feet of a distribution center (that accommodates more than 100 trucks per day, more than 40 trucks with operating transport refrigeration units [TRUs] per day, or where TRU unit operations exceed 300 hours per week). Take into account the configuration of existing distribution centers and avoid locating residences and other sensitive land uses near entry and exit points.
Rail Yards	Avoid siting new sensitive land uses within 1,000 feet of a major service and maintenance rail yard. Within one mile of a rail yard, consider possible siting limitations and mitigation approaches.
Ports	Avoid siting of new sensitive land uses immediately downwind of ports in the most heavily impacted zones. Consult local air districts or CARB on the status of pending analyses of health risks.
Refineries	Avoid siting new sensitive land uses immediately downwind of petroleum refineries. Consult with local air districts and other local agencies to determine an appropriate separation.
Chrome Platers	Avoid siting new sensitive land uses within 1,000 feet of a chrome plater.
Dry Cleaners Using Perchloroethylene	Avoid siting new sensitive land uses within 300 feet of any dry cleaning operation. For operations with two or more machines, provide 500 feet. For operations with three or more machines, consult with the local air district. Do not site new sensitive land uses in the same building with perchloroethylene dry cleaning operations.
Gasoline Dispensing Facilities	Avoid siting new sensitive land uses within 300 feet of a large gas station (defined as a facility with a throughput of 3.6 million gallons per year or greater). A 50-foot separation is recommended for typical gas dispensing facilities.

Source: CARB 2005.

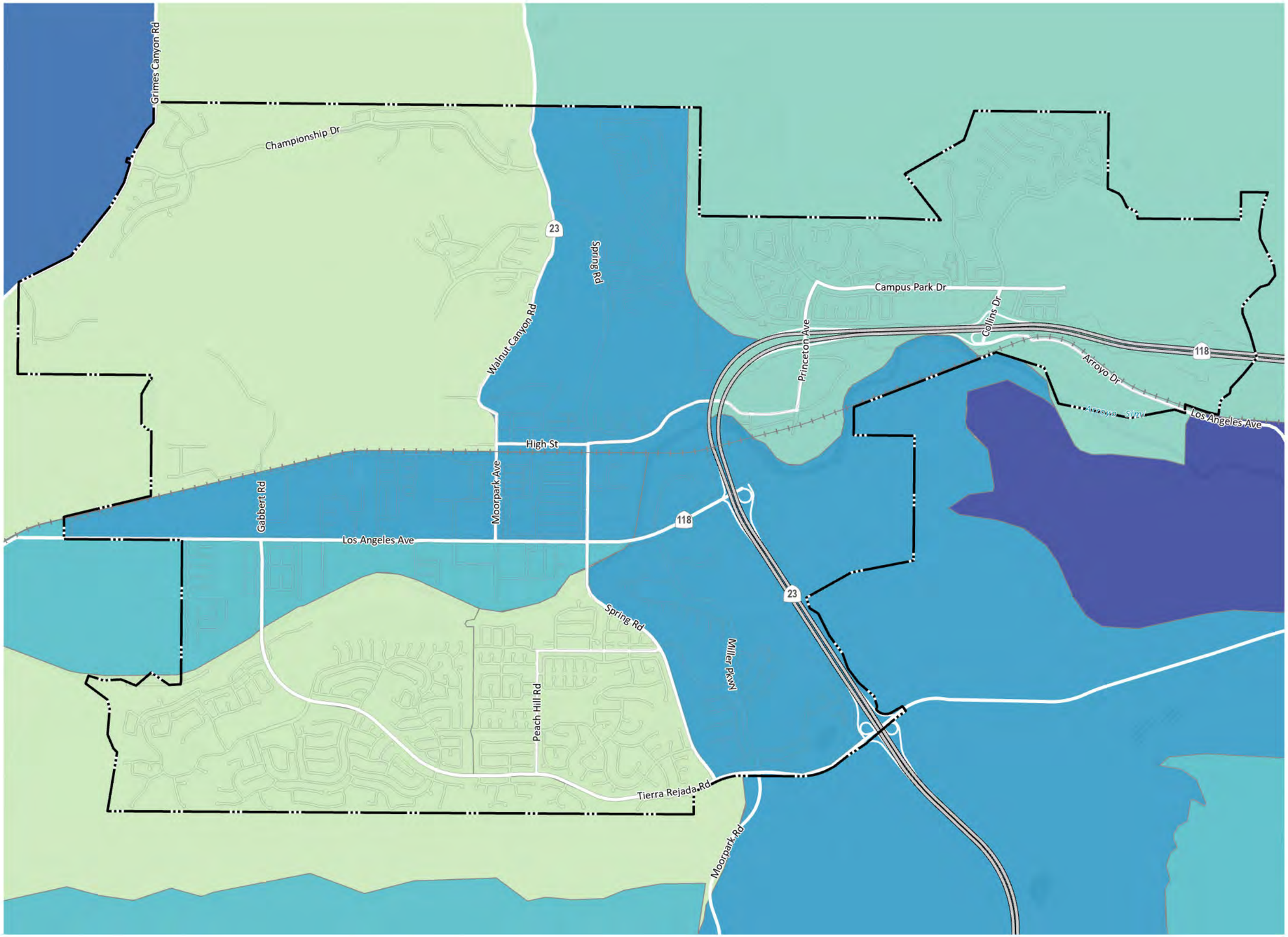
CalEnviroScreen Air Quality Indicators

CES is a mapping tool the helps identify the California communities that are most affected by sources of pollution, and where people are especially vulnerable to pollution's effects. People in environmental justice areas identified by CES4 may be disproportionately affected by and vulnerable to poor air quality. CES's "pollution burden" map identifies communities that are exposed to pollution from human activities, such as air pollution (ozone, $PM_{2.5}$, DPM), water pollution (drinking water contaminants), hazardous materials (pesticide use, children's lead exposure, toxic releases), and traffic density. Figure 5.3-1, *CalEnviroScreen Pollution Burden Percentile*, shows the pollution burden for Moorpark compared to the rest of California. Figure 5.3-2, *CalEnviroScreen Diesel Particulate Matter Percentile*, shows the DPM percentile for Moorpark compared to the rest of California. The CES pollution burden scope considers the disproportionate effect of pollution on environmental justice communities because the score weighs socioeconomic factors (e.g., educational attainment, poverty) and sensitivity of the population (e.g., asthma rates, cardiovascular disease).

Though the causes of asthma are poorly understood, it is well established that exposure to traffic and outdoor air pollutants can trigger asthma attacks. Children, the elderly, and low-income Californians suffer disproportionately from asthma. Figure 5.3-3, *CalEnviroScreen Asthma Percentile*, shows the asthma percentile for Moorpark compared to the rest of California.

Figure 5.3-1

CalEnviroScreen Pollution Burden Percentile



City Boundary

Railroad

Pollution Burden Percentile

- > 90 - 100
- > 80 - 90
- > 70 - 80
- > 60 - 70
- > 50 - 60
- > 40 - 50
- > 30 - 40
- > 20 - 30
- > 10 - 20
- 0 - 10

MADE BY MOORPARK General Plan 2050

Draft Environmental Impact Report

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Source: PlaceWorks, 2022

Date: 10/17/2022

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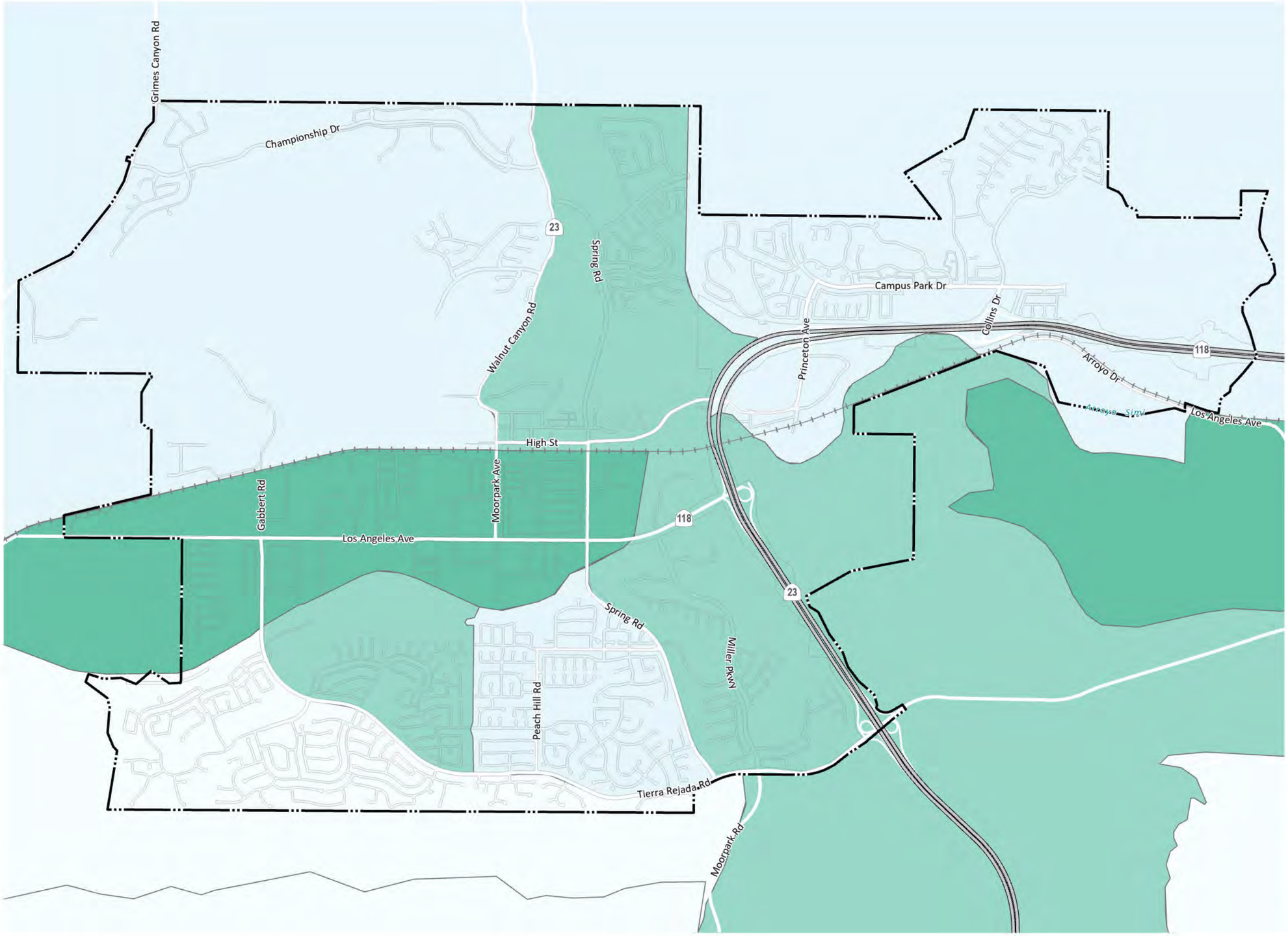
Figure 5.3-2

CalEnviroScreen Diesel Particulate Matter Percentile



City Boundary

Railroad

Diesel Particulate Matter Percentile

- > 90 - 100
- > 80 - 90
- > 70 - 80
- > 60 - 70
- > 50 - 60
- > 40 - 50
- > 30 - 40
- > 20 - 30
- > 10 - 20
- 0 - 10

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Source: PlaceWorks, 2022

Date: 10/17/2022

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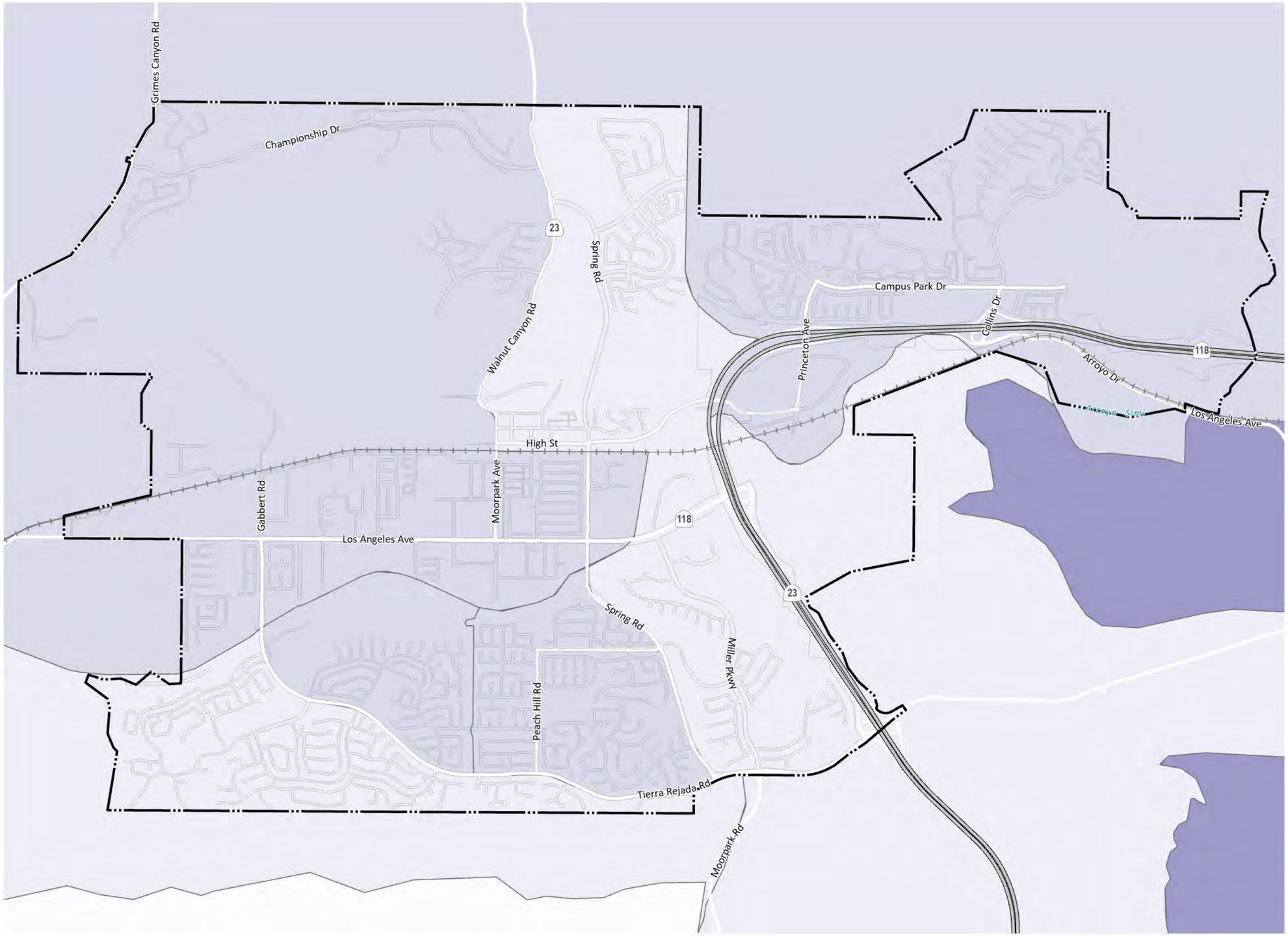
Figure 5.3-3

CalEnviroScreen Asthma Percentile



City Boundary

Railroad

Asthma Percentile

- > 90 - 100
- > 80 - 90
- > 70 - 80
- > 60 - 70
- > 50 - 60
- > 40 - 50
- > 30 - 40
- > 20 - 30
- > 10 - 20
- 0 - 10

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Source: PlaceWorks, 2022

Date: 10/17/2022

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5.3.2 Thresholds of Significance

According to Appendix G of the CEQA Guidelines, a project would normally have a significant effect on the environment if the project would:

AQ-1 Conflict with or obstruct implementation of the applicable air quality plan.

AQ-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.

AQ-3 Expose sensitive receptors to substantial pollutant concentrations.

AQ-4 Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people.

5.3.2.1 VENTURA COUNTY APCD THRESHOLDS

CEQA allows the significance criteria established by the applicable air quality management district or air pollution control district to be used to assess impacts of a project on air quality. The Ventura County APCD has established thresholds of significance in the *Ventura County Air Quality Assessment Guidelines* (2003).

Regional Significance Thresholds

Ventura County APCD has adopted regional emissions thresholds to determine a project's contribution to the region's nonattainment designations. Table 5.3-7, *Ventura County APCD Regional Criteria Air Pollutant Thresholds,* lists thresholds that are applicable for all projects uniformly in Ventura County, regardless of size or scope, and excluding the Ojai Planning Area.

Table 5.3-7 Ventura County APCD Regional Criteria Air Pollutant Thresholds

Air Pollutant	Pounds per Day (lbs/day)	
	Thresholds for Project Consistent with the AQMP[1]	Threshold for Project Not Consistent with the AQMP[2]
Reactive Organic Gases (ROG)	25	2
Nitrogen Oxides (NOx)	25	2

Source: Ventura County APCD 2003. (excluding the Ojai Planning Area).
[1] Applied to both construction and operation.
[2] Projects that are inconsistent with the AQMP and exceed the cumulative threshold would result in a significant impact.

In addition to these daily thresholds, projects are also subject to the ambient air quality standards. These are addressed though an analysis of localized CO impacts. The California 1 hour and 8-hour CO standards are:

- 1 hour = 20 parts per million
- 8 hour = 9 parts per million

The significance of localized project impacts depends on whether ambient CO levels in the vicinity of the project are above or below state and federal CO standards. If ambient levels are below the standards, a

project is considered to have significant impacts if project emissions result in an exceedance of one or more of these standards. Ventura County APCD recommends the use of a CO hotspot screening analysis using the screening procedure in Caltrans's CO Protocol to calculate 8-hour average CO concentrations for any project with indirect emissions greater than the applicable ozone project significance thresholds that may significantly impact roadway intersections (Ventura County APCD 2003). If the screening analysis indicates that there may be a CO hotspot, the CALINE4 computer model should be run to determine if a project may create or contribute to an existing CO hotspot (Ventura County APCD 2003).

Projects that exceed the regional significance threshold contribute to the nonattainment designation of the SCCAB. The attainment designations are based on the AAQS, which are set at levels of exposure that are determined to not result in adverse health effects. Exposure to fine particulate pollution and ozone causes myriad health impacts, particularly to the respiratory and cardiovascular systems:

- Increases cancer risk ($PM_{2.5}$, PM_{10}, TACs)
- Aggravates respiratory disease (SO_2, NO_2, PM_{10}, $PM_{2.5}$)
- Increases bronchitis (O_3, NO_2, PM_{10})
- Causes chest discomfort, throat irritation, and increased effort to take a deep breath (O_3, PM_{10})
- Reduces resistance to infections and increases fatigue (O_3)
- Contributes to heart disease and heart attacks (O_3)
- Contributes to premature death (PM_{10}, $PM_{2.5}$ Ventura County APCD 2003)

Ventura County APCD is the primary agency responsible for ensuring the health and welfare of sensitive individuals exposed to elevated concentrations of air pollutants in Ventura County and has established thresholds that would be protective of these individuals. To achieve the health-based standards established by the EPA, Ventura County APCD prepares AQMPs that detail regional programs to attain the AAQS.

Mass emissions in Table 5.3-7 are not correlated with concentrations of air pollutants but contribute to the cumulative air quality impacts in the SCCAB. The thresholds are based on the trigger levels for the federal New Source Review Program, which was created to ensure projects are consistent with attainment of health-based federal AAQS. Regional emissions from a single project do not single-handedly trigger a regional health impact, and it is speculative to identify how many more individuals in the air basin would be affected by the health effects listed above. Projects that do not exceed the Ventura County APCD regional significance thresholds in Table 5.3-7 would not violate any air quality standards or contribute substantially to an existing or projected air quality violation.

If projects exceed the emissions in Table 5.3-7, emissions would cumulatively contribute to the nonattainment status and would contribute to elevating health effects associated with these criteria air pollutants. Known health effects related to ozone include worsening of bronchitis, asthma, and emphysema and a decrease in lung function. Health effects associated with particulate matter include premature death of

people with heart or lung disease, nonfatal heart attacks, irregular heartbeat, decreased lung function, and increased respiratory symptoms. Reducing emissions would contribute to reducing possible health effects related to criteria air pollutants. However, for projects that exceed the emissions in Table 5.3-7, it is speculative to determine how this would affect the number of days the region is in nonattainment—since mass emissions are not correlated with concentrations of emissions—or how many additional individuals in the air basin would be affected.

Ventura County APCD has not provided methodology to assess the specific correlation between mass emissions generated and the effect on health in order to address the issue raised in *Sierra Club v. County of Fresno* (Friant Ranch, L.P.) (2018) 6 Cal.5th 502, Case No. S21978. Ozone concentrations are dependent upon a variety of complex factors, including the presence of sunlight and precursor pollutants, natural topography, nearby structures that cause building downwash, atmospheric stability, and wind patterns. Because of the complexities of predicting ground-level ozone concentrations in relation to the National AAQS and California AAQS, it is not possible to link health risks to the magnitude of emissions exceeding the significance thresholds. However, if a project in the SCCAB exceeds the regional significance thresholds, the project could contribute to an increase in health effects in the basin until the attainment standards are met in the SCCAB.

CO Hotspots

Areas of vehicle congestion have the potential to create pockets of CO called hotspots. These pockets have the potential to exceed the state one-hour standard of 20 parts per million (ppm) or the eight-hour standard of 9 ppm. Because CO is produced in greatest quantities from vehicle combustion and does not readily disperse into the atmosphere, adherence to ambient air quality standards is typically demonstrated through an analysis of localized CO concentrations. Hotspots are typically produced at intersections, where traffic congestion is highest because vehicles queue for longer periods and are subject to reduced speeds. With the turnover of older vehicles, introduction of cleaner fuels, and implementation of control technology on industrial facilities, CO concentrations in the SCCAB and the state have steadily declined.

The SCCAB is designated in attainment for CO under both the California AAQS and National AAQS. The CO hotspot analysis conducted for the attainment by Ventura County APCD did not predict a violation of CO standards at the Simi Valley Monitoring Station (Ventura County APCD 2003). Under existing and future vehicle emission rates, a project would have to increase traffic volumes at a single intersection by more than 44,000 vehicles per hour—or 24,000 vehicles per hour where vertical and/or horizontal air does not mix—in order to generate a significant CO impact (BAAQMD 2017).[6]

[6] The CO hotspot analysis refers to the modeling conducted by the Bay Area Air Quality Management District for its CEQA Guidelines because it is based on newer data and considers the improvement in mobile-source CO emissions. Although meteorological conditions in the Bay Area differ from those in the Southern California region, the modeling conducted by BAAQMD demonstrates that the net increase in peak hour traffic volumes at an intersection in a single hour would need to be substantial.

Localized Significance Thresholds

A project would generate a significant impact if it generates emissions that would violate the AAQS, when added to the local background concentrations.

Health Risk Thresholds

Whenever a project would require use of chemical compounds that have been identified in Ventura County APCD Regulation II, placed on CARB's air toxics list pursuant to AB 1807, or placed on the EPA's National Emissions Standards for Hazardous Air Pollutants, a health risk assessment is required by the Ventura County APCD. Table 5.3-8, *Ventura County APCD Toxic Air Contaminants Incremental Risk Thresholds*, lists the TAC incremental risk thresholds for operation of a project. The purpose of this environmental evaluation is to identify the significant effects of the proposed project on the environment, not the significant effects of the environment on the proposed project. See *California Building Industry Association v. Bay Area Air Quality Management District* (2015) 62 Cal.4th 369 (Case No. S213478). CEQA does not require an analysis of the environmental effects of attracting development and people to an area. However, the environmental document must analyze the impacts of environmental hazards on future users when a proposed project exacerbates an existing environmental hazard or condition. Residential, commercial, and office uses do not use substantial quantities of TACs and typically do not exacerbate existing hazards, so these thresholds are typically applied to new industrial projects.

Table 5.3-8 Ventura County APCD Toxic Air Contaminants Incremental Risk Thresholds

Maximum Incremental Cancer Risk	≥ 10 in 1 million
Hazard Index (project increment)	≥ 1.0

Source: Ventura County APCD 2003.

5.3.3 Environmental Impacts

5.3.3.1 METHODOLOGY

The air quality evaluation was prepared in accordance with the requirements of CEQA to determine if significant air quality impacts are likely to occur in conjunction with future development that would be accommodated by the proposed project. The Ventura County APCD's published *Ventura County Air Quality Assessment Guidelines* and its updates on the Ventura County APCD website are intended to provide local governments with guidance for analyzing and mitigating project-specific air quality impacts. It provides standards, methodologies, and procedures for conducting air quality analyses in EIRs that were used in this analysis. Following is a summary by sector of the assumptions used for the city's criteria air pollutant emissions inventory and forecast, included in Appendix D.

- **Building Energy.** Existing 2022 emissions associated with natural gas use for residential and nonresidential land uses in the city were extrapolated based on data provided by the Southern California

Gas Company (SoCalGas) for years 2016 through 2019. Forecasts are adjusted for increases in population for natural gas use and nonresidential square footage for nonresidential natural gas use in the city.

- **Transportation.** Transportation emissions forecasts were modeled using emissions data from CARB's EMFAC2021 V1.0.2 web database. Model runs were based on daily VMT data provided by Iteris (see Appendix K) and calendar year 2022 (existing) and 2050 emission rates.[7] The VMT is based on origin-destination using the Ventura County Transportation Model and includes the full trip length for land uses in the city and a 50 percent reduction in the trip length for external-internal/internal-external trips, based on the recommendations of CARB's Regional Targets Advisory Committee under SB 375.[8] Consistent with CARB's methodology in the Climate Change Scoping Plan Measure Documentation Supplement, daily VMT was multiplied by 347 days per year to account for reduced traffic on weekends and holidays to determine annual emissions.

- **Off-Road Equipment.** OFFROAD is a database of equipment use and associated emissions for each county compiled by CARB. Off-road equipment in the city is based on year 2022 emission rates for Ventura County obtained from CARB's OFFROAD V1.0.3 web database. OFFROAD was used to estimate criteria air pollutant emissions from lawn and garden, light commercial, and construction equipment in the city. In order to determine the percentage of emissions attributable to the city, light commercial equipment is estimated based on employment for Moorpark as a percentage of Ventura County and forecast based on the change in employment in the city. Construction equipment use is estimated based on building permit data for Moorpark and Ventura County from data compiled by the US Census and assumes that construction emissions for the forecast year would be similar to historical levels. Lawn and garden equipment emissions are based on the percentage of population in Moorpark compared to Ventura County and forecast based on the change in population in the city.

- **Area Sources.** Area sources are based on CalEEMod defaults for emissions generated from use of consumer products and cleaning supplies (CAPCOA 2022).

[7] The Year 2050 inventory represents the projected emissions that the existing land uses would generate in the future, using year 2050 emission factors for on-road vehicles. To isolate the impacts related to the change in land uses proposed under the Moorpark General Plan 2050 update, emissions related to the update will be based on the difference in emissions generated by the existing and proposed land uses under year 2050 conditions. This approach is taken because existing land uses would be subject to regulations that come into effect in the future that reduce mobile-source emissions. Thus, the level of emissions the existing land uses generate today would not be generated in perpetuity, but would be affected by these state regulations.

[8] For accounting purposes, there are three types of trips:
Internal-Internal. Vehicle trips that originated and terminated within the City (Internal-Internal, I-I). Using the accounting rules established by RTAC, 100 percent of the length of these trips and their emissions are attributed to the City.
Internal-External/External-Internal. Vehicle trips that either originated or terminated (but not both) in the City (Internal-External or External-Internal, I-X and X-I). Using the accounting rules established by RTAC, 50 percent of the trip length for these trips is attributed to the City.
External-External. Vehicle trips that neither originated nor terminated in the City. These trips are commonly called pass-through trips (External-External, X-X). Using the accounting rules established by RTAC, these trips are not counted toward the City's VMT or emissions.

Impacts of the Environment on a Project

In 2016, the California Legislature passed SB 1000, Planning for Healthy Communities Act, to incorporate environmental justice into the local land use planning process. SB 1000 requires local governments to address pollution and other hazards that disproportionately impact low-income communities and communities of color in their jurisdictions. SB 1000 mandates that general plans address environmental justice but does not require CEQA analyses to address environmental justice issues. The proposed project addresses air quality and health risk impacts from implementation of the proposed project on land uses that are sensitive to the effects of poor air quality.

Buildout of the proposed land use plan under the proposed project could result in sensitive uses (e.g., residential) being sited near sources of emissions (e.g., freeways, industrial uses, etc.). Developing new sensitive land uses near sources of emissions could expose persons that inhabit these sensitive land uses to potential air quality-related impacts. However, the purpose of this environmental evaluation is to identify the significant effects of the proposed project on the environment, not the significant effects of the environment on the proposed project. *California Building Industry Association v. Bay Area Air Quality Management District* (2015) 62 Cal.4th 369 (Case No. S213478). Thus, CEQA does not require analysis of the potential environmental effects from siting sensitive receptors near existing sources, and this type of analysis is not provided in Section 5.3.3. However, the proposed project includes policies that would require design features to minimize air quality impacts and to achieve appropriate health standards. The following Land Use Element policies would minimize land use compatibility conflicts when siting new sensitive land uses:

- **Policy LU-5.5 Compatible land uses.** Require design features that provide visual relief and separation between land uses of conflicting character.
- **Policy LU-7.1 Mitigate environmental impacts.** Locate and design new development to minimize adverse visual and/or environmental impacts to the community.
- **Policy LU-7.3 Protect uses from hazards.** Require that new development be located and designed to avoid or mitigate any potentially hazardous conditions.

5.3.3.2 IMPACT ANALYSIS

The applicable thresholds are identified in brackets after the impact statement.

Impact 5.3-1: Buildout of the Moorpark General Plan 2050, and associated emissions, could exceed the assumptions of the Ventura County AQMP. [Threshold AQ-1]

The Ventura County APCD is directly responsible for reducing emissions from area, stationary, and mobile sources in the SCCAB to achieve the National and California AAQS and has responded to this requirement by preparing an AQMP. The Ventura County APCD Governing Board adopted the 2016 Ventura County AQMP and plans to adopt the proposed 2022 Ventura County AQMP in December 2022 as a regional and multiagency effort (South Coast AQMD, CARB, SCAG, and EPA).

A consistency determination with the AQMP plays an important role in local agency project review by linking local planning and individual projects to the AQMP. It fulfills the CEQA goal of informing decision makers of the environmental efforts of the project under consideration early enough to ensure that air quality concerns are fully addressed. It also provides the local agency with ongoing information as to whether they are contributing to the clean air goals in the AQMP.

The two principal criteria for conformance with an AQMP are:

1. Whether the project would exceed the assumptions in the AQMP.
2. Whether the project would result in an increase in the frequency or severity of existing air quality violations, cause or contribute to new violations, or delay timeline attainment of air quality standards.

SCAG is Ventura County APCD's partner in the preparation of the AQMP, providing the latest economic and demographic forecasts and developing transportation measures. Regional population, housing, and employment projects developed by SCAG are based, in part, on general plan land use designations. These projections form the foundation for the emissions inventory of the AQMP.

Criterion 1

Table 5.3-9, *Comparison of Population and Employment Forecast*, compares the population and employment growth forecast under the proposed project to the existing conditions. The table shows that the proposed project would result in more daily VMT as a result of an increase in population; however, VMT per service population would decrease from the existing conditions and compared to the current General Plan. As a result, the proposed project provides more efficient land use than existing conditions and the current General Plan, and a more efficient land use plan that reduces VMT per resident and employee.

Table 5.3-9 Comparison of Population and Employment Forecast

Scenario	Existing	Current General Plan	Proposed General Plan	Change from Existing		Change from the Current General Plan	
				Change	%	Change	%
Population	36,445	45,335	53,781	17,336	48%	8,446	19%
Employment	12,915	16,917	20,249	7,334	57%	3,332	20%
Service Population (SP)[1]	49,360	62,252	74,030	24,670	50%	11,778	19%
Daily VMT[2]	472,786	532,234	602,485	129,698	27%	70,250	13%
VMT/SP	9.58	8.55	8.14	-1.4	-15%	-0.4	-5%

[1] Service population (SP) consists of the aggregate of total employees and population within the study area.
[2] Source: Appendix K (Iteris 2022) See Section 5.17, *Transportation*, based on the origin-destination accounting method.

In addition, the Circulation Element includes the following policies to coordinate with the Ventura County APCD to reduce VMT:

- **Policy CI-6.3 Ventura County Air Pollution Control District.** Support the Ventura County Air Pollution Control District in its effort to implement transportation demand management strategies.
- **Policy CI-1.1 Air quality coordination.** Cooperate and participate with Ventura County Air Pollution Control District, Southern California Association of Governments, and the California Air Resources Board, in regional air quality management plans, programs, enforcement measures, and mitigation measures designed to reduce and/or minimize the amount of primary and secondary air pollutants.

Therefore, the proposed project would be consistent with the AQMP under the first criterion.

Criterion 2

The SCCAB is designated nonattainment for O_3 and PM_{10} under the California and National AAQS (CARB 2022a). Because the proposed project involves long-term growth associated with buildout of the city, cumulative emissions generated from operation of individual development projects would exceed the Ventura County APCD's regional and localized thresholds (see Impact 5.3-2 and Impact 5.3-3). Consequently, emissions generated by development projects as well as existing sources in the city are considered to cumulatively contribute to the nonattainment designations of the SCCAB. Buildout of the proposed land use plan associated with the proposed project could contribute to an increase in frequency or severity of air quality violations and delay attainment of the AAQS or interim emission reductions in the AQMP, and emissions generated from buildout would result in a significant air quality impact. Therefore, the proposed project would be inconsistent with the AQMP. As identified in Impact 5.3-3, the proposed project would result in a substantial increase in VOC and NO_X compared to existing conditions.

Summary

Buildout of the proposed project would be consistent with the AQMP under the first criterion. However, air pollutant emissions associated with buildout of the proposed project would cumulatively contribute to the nonattainment designations in the SCCAB. Therefore, the proposed project would be inconsistent with the AQMP.

Level of Significance Before Mitigation: Potentially significant.

Impact 5.3-2: Construction activities associated with the proposed project could generate short-term emissions in exceedance of Ventura County APCD's threshold criteria. [Thresholds AQ-2 and AQ-3]

Construction activities under the proposed project would temporarily increase PM_{10}, $PM_{2.5}$, VOC, NO_X, SO_X, and CO regional emissions in the SCCAB. The primary source of NO_X, CO, and SO_X emissions is the operation of construction equipment. The primary sources of particulate matter (PM_{10} and $PM_{2.5}$) emissions are activities that disturb the soil, such as grading and excavation, road construction, and building demolition and construction. The primary sources of VOC emissions are the application of architectural coating and off-gas emissions associated with asphalt paving. A discussion of health impacts associated with air pollutant emissions generated by construction activities is included in Section 5.3.1.1, *Air Pollutants of Concern*.

Construction activities associated with the proposed project would occur over the buildout horizon of the plan, causing short-term emissions of criteria air pollutants. However, information regarding specific development projects, soil types, and the locations of receptors would be needed to quantify the level of impact associated with construction activity. Due to the scale of development activity associated with buildout of the proposed project, emissions would likely exceed the Ventura County APCD's regional significance thresholds. In accordance with the Ventura County APCD methodology, emissions that exceed the regional significance thresholds would cumulatively contribute to the nonattainment designations of the SCCAB.

Air quality emissions related to construction must be addressed on a project-by-project basis. For the proposed project, which is a broad-based policy plan, it is not possible to determine whether the scale and phasing of individual projects would exceed the Ventura County APCD's short-term regional or localized construction emissions thresholds. In addition to regulatory measures—e.g., Ventura County APCD Regulation IV, Rule 55 for fugitive dust control and CARB's Airborne Toxic Control Measures—mitigation imposed at the project level may include extension of construction schedules and/or use of special equipment.

Though individual projects under the proposed project may not exceed the South Coast AQMD regional significance thresholds, the likely scale and extent of construction activities associated with future development under the Moorpark General Plan 2050 would likely exceed the relevant Ventura County APCD's thresholds for some projects. Construction-related regional air quality impacts of developments that would be accommodated by the proposed project would be potentially significant.

Level of Significance Before Mitigation: Potentially significant.

Impact 5.3-3: Implementation of the proposed project could additional, long-term emissions in exceedance of Ventura County APCD's threshold criteria and cumulatively contribute to the SCCAB's nonattainment designations. [Thresholds AQ-2]

The Moorpark General Plan guides growth and development in the city by designating allowed land uses by parcel and through implementation of its goals and policies. New development would increase air pollutant emissions in the city and contribute to the overall emissions in the SCCAB. A discussion of health impacts associated with air pollutant emissions generated by operational activities is included under "Air Pollutants of Concern" in Section 5.3.1.2, *Regulatory Framework*. The proposed project sets up the framework for growth and development but does not directly result in development. Before development can occur, it must be analyzed for conformance with the general plan, zoning requirements, and other applicable local and State requirements; comply with the requirements of CEQA; and obtain all necessary clearances and permits.

Criteria Air Pollutant Emissions Forecast

The emissions forecast for Moorpark is shown in Table 5.3-10, *City of Moorpark Regional Criteria Air Pollutant Emissions Forecast*. As shown in the table, buildout of the proposed project would result in an increase in long-term emissions that exceeds the daily Ventura County APCD's thresholds for VOC and NO_X. The increase in VOC emissions compared to the existing land uses is due to the increase in residential uses, which results in

an increase in consumer product use. Emissions of VOC that exceed the Ventura County APCD's regional significance thresholds would contribute to the O_3 nonattainment designation of the SCCAB.

Table 5.3-10 City of Moorpark Regional Criteria Air Pollutant Emissions Forecast

Sector	Criteria Air Pollutant Emissions (pounds per day)			
	VOC	NO_X	PM_{10}	$PM_{2.5}$
Existing Land Uses at Buildout[1]				
Transportation	6	59	NA	NA
Energy	23	171	NA	NA
Area –Offroad Equipment	121	71	NA	NA
Area – Consumer Products	427	–	–	–
Existing Total	**577**	**300**	**NA**	**NA**
Proposed Project				
Transportation	8	69	NA	NA
Energy	127	265	NA	NA
Area –Offroad Equipment	181	102	NA	NA
Area – Consumer Products	711	–	–	–
Proposed Project Total	**1,027**	**436**	**NA**	**NA**
Change from Existing Land Uses				
Transportation	2	10	NA	NA
Energy	104	94	NA	NA
Area –Offroad Equipment	60	31	NA	NA
Area – Consumer Products	284	–	–	–
TOTAL	**450**	**135**	**NA**	**NA**
Ventura County APCD Regional Significance Threshold	25	25	NA	NA
Significant?	**Yes**	**Yes**	**NA**	**NA**

Sources. See Appendix D.
Note: Ventura County APCD only has regional significance thresholds for VOC and NO_X.
1 Existing land uses modeled using 2050 emission rates in order to isolate the effect of the land use changes associated with the proposed project.

The Moorpark General Plan 2050 Conservation Element policies under Goal 1, Air Quality (Policies COS-1.1 through COS-1.8) would reduce regional air pollutant emissions in the city. Conservation Element Policy LU-8.1; Land Use Element Policies LU-8.1 through LU-8.2 and Policies LU-4.1 through LU-4.10; and Circulation Element Policy CI-13.7 would reduce GHG and energy emissions and therefore have air quality co-benefits. In addition, Land Use Element Policies LU-4.1 through LU-4.7; Circulation Element Policies CI-6.1 and CI-6.3; and Conservation Element Policies COS-1.3 to COS-1.4, COS-2.2 to COS-2.4, and COS-6.1 to COS-6.4 would aid in reducing VMT and emissions.

Despite the policies in the Moorpark General Plan 2050, the proposed project would exceed the Ventura County APCD's regional significance thresholds and would contribute to the nonattainment designation of the SCCAB.

Level of Significance Before Mitigation: Potentially significant.

Impact 5.3-4: The proposed project could expose sensitive receptors to substantial toxic air contaminant concentrations. [Threshold AQ-3]

Development and operation of new land uses accommodated under the proposed project proposed land use plan could generate new sources of localized criteria air pollutant and TACs in the city from area/stationary sources and mobile sources.

CO Hotspots

Areas of vehicle congestion have the potential to create pockets of CO called hotspots. The SCCAB was designated in attainment for CO under both the California AAQS and National AAQS (CARB 2022). The CO hotspot analysis conducted for the attainment by Ventura County APCD did not predict a violation of CO standards based on the highest 1-hour and 8-hour CO concentrations at the Simi Valley monitoring station (Ventura County APCD 2003).

To generate a significant CO impact under existing and future vehicle emission rates, a project would have to increase traffic volumes at a single intersection by more than 44,000 vehicles per hour—or 24,000 vehicles per hour where vertical and/or horizontal air does not mix (BAAQMD 2017). Implementation of the proposed project under horizon year conditions would not result in hourly traffic increases of this magnitude. This net increase would be below the screening criteria. Thus, implementation of the proposed project would not produce the volume of traffic required to generate a CO hotspot, and CO hotspots impacts would be less than significant.

Permitted Stationary Sources

Various industrial and commercial processes (e.g., manufacturing, dry cleaning) allowed under the proposed land use plan would be expected to release TACs. Industrial land uses, such as chemical processing facilities, chrome-plating facilities, dry cleaners, and gasoline-dispensing facilities, have the potential to be substantial stationary sources that would require a permit from Ventura County APCD. Emissions of TACs would be subject to further study and health risk assessment prior to the issuance of any necessary air quality permits under Ventura County APCD Rule 26, New Source Review. This would ensure less than significant impacts.

Industrial Land Uses

Warehousing or industrial operations generate substantial DPM emissions from off-road equipment use, truck idling, and/or use of transport refrigeration units for cold storage. The Moorpark General Plan 2050 would result in 7,951,510 square feet of industrial land uses at buildout under the Industrial Flex (IF) and Industrial Park (IP) land use designations. This would be an increase of 3,674,215 square feet of industrial uses from existing conditions, primarily in the western portion of the city on Los Angeles Avenue.

The following policies would also ensure new industrial land uses would not generate substantial emissions near sensitive land uses.

Conservation Element

- **Policy COS-1.7 Air quality education.** Educate the public about air quality standards, health effects, and efforts they can make to improve air quality and reduce greenhouse gas emissions in the region.

- **Policy COS-1.8 Local air quality concerns.** Work with the development community, local businesses, residents, regulatory bodies, and other stakeholders to minimize air pollution, clean ambient air quality, and minimize objectionable odors generated by vehicles, major emitters, agricultural uses, and other land uses.

Land Use Element

- **Policy LU-3.6 Industries and jobs.** Prioritize the development of industries that have limited emissions, meet local, regional, and state air and water pollution control goals and standards, and are designed to be compatible with surrounding land uses.

- **Policy LU-10.4 Overconcentration of impact uses.** Avoid the overconcentration of uses and facilities that disproportionally affect a particular neighborhood, center, or corridor, such as industries producing high levels of air emissions and pollution and trucking yards, to ensure that such uses do not result in an inequitable environmental burden on low-income or minority neighborhoods.

- **Policy LU-14.2 Managed truck access**. Require that automobile and truck access to commercial properties be located so as to minimize impacts to adjacent uses.

Though stationary sources associated with Moorpark General Plan 2050 would be required to comply with Ventura County APCD Rule 26, truck idling does not fall under the purview of the air district. Therefore, health risk impacts from development of industrial warehousing are considered potentially significant.

Level of Significance Before Mitigation: Potentially significant.

Impact 5.3-5: The proposed project would not result in other emissions (such as those leading to odors) that would adversely affect a substantial number of people. [Threshold AQ-4]

Growth in the city under the proposed project could generate new sources of odors. Nuisance odors from land uses in the SCCAB are regulated under Ventura County APCD Rule 51, Nuisance, which states:

> A person shall not discharge from any source whatsoever such quantities of air contaminants or other material which cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or which endanger the comfort, repose, health or safety of any such persons or the public, or which cause, or have a natural tendency to cause injury or damage to business or property. Pursuant to California Health and Safety Code Section 41705, this rule shall not apply to odors emanating from agricultural operations necessary for the growing of crops or the raising of fowl or animals.

Operation

Residential and other nonresidential, nonindustrial land uses that would be accommodated by the proposed project could result in the generation of odors, such as exhaust from landscaping equipment and from cooking. Unlike industrial land uses, these are not considered potential generators of odor that could affect a substantial number of people. Compost facilities, landfills, solid-waste transfer stations, fiberglass manufacturing facilities, paint/coating operations (e.g., auto body shops), asphalt batch manufacturing plants, chemical manufacturing, and food manufacturing facilities are typical sources of odors from industrial land uses. Nuisance odors are regulated under Ventura County APCD Rule 51, which requires abatement of any nuisance generating a verified odor complaint.

In addition, Conservation Element Policy COS-1.8 would minimize nuisance odors.

- **Policy COS-1.8 Local air quality concerns.** Work with the development community, local businesses, residents, regulatory bodies, and other stakeholders to minimize air pollution, clean ambient air quality, and minimize objectionable odors generated by vehicles, major emitters, agricultural uses, and other land uses.

Therefore, impacts from potential odors generated from land uses associated with the proposed project are considered less than significant.

Construction

During construction activities of development projects that would be accommodated by the proposed project, construction equipment exhaust and application of asphalt and architectural coatings would temporarily generate odors. Any construction-related odor emissions would be temporary and intermittent. Noxious odors would be confined to the immediate vicinity of the construction equipment in use. By the time such emissions reached any sensitive receptor sites, they would be diluted to well below any level of air quality concern. Short-term construction-related odors are expected to cease upon the drying or hardening of odor-producing materials. Therefore, impacts associated with construction-generated odors are considered less than significant.

Level of Significance Before Mitigation: Less than significant.

5.3.4 Relevant General Plan Policies

Land Use Element

- **Policy LU-3.6 Industries and jobs.** Prioritize the development of industries that have limited emissions, meet local, regional, and state air and water pollution control goals and standards, and are designed to be compatible with surrounding land uses.

- **Policy LU-3.7 Transit-oriented development.** Promote opportunities to develop uses that can economically benefit from their proximity to the Moorpark Metrolink station and promote increased ridership.

- **Policy LU-4.1 Sustainable urban form.** Provide an overall pattern of land uses that promotes efficient development; reduces automobile dependence, greenhouse gas emissions; and consumption of non-renewable resources; ensures compatibility among uses; enhances community livability and health; and sustains economic vitality.

- **Policy LU-4.2 Focused development.** Reinforce existing patterns of development by concentrating development in key centers and districts serving as destinations and gathering places for the community that are linked by pedestrian connections to adjoining residential neighborhoods, such as the downtown High Street corridor, Mission-Bell/Moorpark Town Center, and Moorpark Marketplace.

- **Policy LU-4.3 Residential neighborhoods.** Maintain a development pattern of distinct residential neighborhoods oriented around parks, schools, and community facilities that are connected with neighborhood-serving businesses and public transit.

- **Policy LU-4.4 Multi-family housing.** Promote the development of multiple-family dwellings in close proximity to employment opportunities, shopping areas, public parks, and transit lines, with careful consideration of the proximity to and compatibility with single-family neighborhoods.

- **Policy LU-4.5 Community-serving uses.** Encourage uses that meet the daily needs of residents such as grocery stores, local-serving restaurants, and service businesses to be located within safe walking distance of residents.

- **Policy LU-4.6 Highway-oriented development.** Cluster commercial development in compact areas along major roadways and provide pedestrian links to adjacent residential areas.

- **Policy LU-4.7 Moorpark College community.** Promote the long-term development of commercial uses and housing in proximity to Moorpark College.

- **Policy LU-8.1 Model of environmental sustainability**. development practices that contribute to the sustainability and stewardship of environmental resources including air quality protection, energy and water efficiency, natural resource conservation, greenhouse gas reduction, and climate change resiliency..

- **Policy LU-8.2 Reduction of energy and water use.** Encourage developers to exceed standards for building design and construction specified by the California Green Building Standards Code, with goals of achieving net zero energy and water use.

- **Policy LU-8.7 Habitat protection.** Encourage public and private projects to be located and designed to preserve significant habitats, vegetation, and other significant educational, scientific, scenic, resources of social value, protect air quality, and reduce greenhouse gas emissions as specified by the Conservation, Open Space and Recreation Element.

- **Policy LU-13.7 Connections with neighborhoods and districts.** Require the development of external cross-connections between commercial uses so as to reduce the number of curb cuts and number of vehicle trips on adjacent roadways.

- **Policy LU-14.2 Managed truck access.** Require that automobile and truck access to commercial properties be located so as to minimize impacts to adjacent uses.
- **Policy LU-16.9 Alternative energy infrastructure.** Encourage large scale industrial development projects, as defined in the Municipal Code, to provide on-site alternative energy sources and containment of stormwater runoff.
- **Policy LU-19.5 Tree canopy.** Maintain and expand the tree canopy in the downtown area to provide shade, improve air and water quality, reduce the heat island effect, and create habitat for birds and pollinators.

Circulation Element

- **Policy CI-1.1 Multimodal transportation.** Require that the planning, design, and construction of all transportation projects consider the needs for all modes of travel to create safe, livable, and inviting environments for motorists, pedestrians, bicyclists, and public transit users of all ages and abilities.
- **Policy CI-1.2 Complete streets.** Design, plan, maintain, and operate streets using complete streets[1] principles for all types of transportation projects including design, planning, construction, maintenance, and operations of new and existing streets and facilities. Encourage street connectivity that aims to create a comprehensive, integrated, connected network for all modes.
- **Policy CI-2.2 Environmental impact threshold.** Maintain thresholds for the determination of environmental impacts for proposed residential, commercial, and industrial uses of a minimum reduction of per capita vehicle miles travelled (VMT) of 15% below existing and no net increase in per capita VMT compared to existing for all other land use types. Periodically review and adjust this threshold as appropriate in consideration of actual vehicle miles and greenhouse gas emissions resulting from implementation of the Land Use Plan.
- **Policy CI-2.3 VMT analysis.** Require the analysis of VMT per resident and/or per employee as part of CEQA environmental review, and development of a mitigation program to reduce any significant impacts consistent with State law.
- **Policy CI-2.4 VMT reduction.** Work to reduce VMT through land use planning, enhanced transit access, localized attractions that reduce the need for travel to adjoining communities, and improved access to non-vehicular modes of transportation.
- **Policy CI-5.1 New bicycle and pedestrian facilities**. Prioritize plans for new bicycle and pedestrian facilities to provide continuity and close gaps in the bikeway and sidewalk network.
- **Policy CI-5.2 Improvements to bikeway network.** Require proposed residential, commercial, and industrial developments to include bikeways in their street improvement plans, consistent with the Circulation Element Bikeway Network Plan (Figure 6) and construct pertinent improvements.

- **Policy CI-5.3 Funding for bikeways.** Require development projects to incorporate or participate in the funding of planned bikeways that allow the community to utilize bicycles as an alternative to automobiles.
- **Policy CI-6.1 Employer incentives.** Encourage businesses to provide incentives for employees to utilize alternatives to the conventional automobile transportation to reduce energy consumption, noise pollution, air pollution, and greenhouse gas emissions, such as shared ride programs, parking cash out , transit benefits, allowing telecommuting and alternative work schedules.
- **Policy CI-6.3 Ventura County Air Pollution Control District.** Support the Ventura County Air Pollution Control District in its effort to implement transportation demand management strategies.
- **Policy CI-6.4 TDM fund expenditure.** The City shall develop a program for expending transportation demand management funds collected as mitigation for project air quality impacts.

Conservation Element

- **Policy COS-1.1 Air quality coordination.** Cooperate and participate with Ventura County Air Pollution Control District, Southern California Association of Governments, and the California Air Resources Board, in regional air quality management plans, programs, enforcement measures and mitigation measures designed to reduce and/or minimize the amount of primary and secondary air pollutants.
- **Policy COS-1.2 Infill development.** Promote infill development to facilitate walking and use of alternative transportation modes and reduce vehicle trips and air emissions.
- **Policy COS-1.3 Development siting.** Require that development be located and designed to reduce the number of vehicle trips generated and air emissions.
- **Policy COS-1.4 Low-emission transportation.** Encourage the use of zero-emission vehicles, low-emission vehicles, bicycles and other non-motorized vehicles, and car-sharing programs by requiring sufficient and convenient infrastructure and parking facilities in residential developments and employment centers to accommodate these vehicles.
- **Policy COS-1.5 Low-emission fleet.** Purchase low-emission vehicles for the City's fleet and to use available clean fuel sources for trucks and heavy equipment.
- **Policy COS-1.6 Clean City transportation options.** Promote reduced idling, trip reduction, routing for efficiency, and the use of public transportation, carpooling, and alternate modes of transportation for City operations.
- **Policy COS-1.7 Air quality education.** Educate the public about air quality standards, health effects, and efforts they can make to improve air quality and reduce greenhouse gas emissions in the region.
- **Policy COS-1.8 Local air quality concerns.** Work with the development community, local businesses, residents, regulatory bodies, and other stakeholders to minimize air pollution, clean ambient air quality,

and minimize objectionable odors generated by vehicles, major emitters, agricultural uses, and other land uses.

- **Policy COS-4.1 New building energy efficiency.** Encourage new buildings to exceed state energy efficiency requirements where cost-effective and equitable, including through the use of improved insulation, all-electric heating and cooling systems, and high-efficiency appliances.
- **Policy COS-4.2 Passive energy conservation.** Require that buildings in large scale commercial, mixed-use, and planned development projects include, to the extent feasible, passive energy-conservation strategies including, but not limited to, location and orientation.
- **Policy COS-4.3 Energy efficiency improvements.** Work with property owners to conduct energy efficiency retrofits and other improvements to existing buildings, particularly rental units and buildings constructed before 1980. Emphasize ways to improve the energy efficiency of existing buildings that are equitable and cost-effective.
- **Policy COS-4.4 Low-cost energy efficiency.** Enact widespread energy efficiency and conservation practices that are accessible and feasible for most or all of the community, including low-cost and free actions and those with accelerated payback periods.
- **Policy COS-4.5 Carbon-free transition.** Transition to low-carbon and carbon-free energy sources for homes and nonresidential buildings.
- **Policy COS-4.6 On-site renewable energy.** Increase the installation of on-site renewable energy systems in all new and existing developments with the capacity to support these systems, enforcing the renewable energy requirements of the California Building Standards Code and encouraging buildings not covered by state requirements to install renewable energy systems.
- **Policy COS-4.7 Energy storage systems.** Encourage new and existing developments to install energy storage systems, particularly for developments in Very High Fire Hazard Severity Zones and for developments providing essential community services.
- **Policy COS-4.8 Energy use at City facilities.** Retrofit City facilities to improve energy efficiency, decrease electric and natural gas use, and install renewable energy and energy storage systems.
- **Policy COS-4.9 Green building practices.** Provide information about, and encourage, incorporating additional green building practices into new development and major retrofits, including active and passive energy-conservation strategies, low-carbon, sustainable building materials, and reuse of building materials.
- **Policy COS-4.10 Regional energy collaboration.** Collaborate with the Ventura County Regional Energy Alliance, the Clean Power Alliance, and other regional energy groups to promote educational campaigns and financial incentives for energy efficiency and conservation, renewable energy, and energy storage.

- **Policy COS-8.1 Greenhouse gas reduction.** Reduce community-wide and City operations greenhouse gas (GHG) emissions from vehicles, residential, and nonresidential energy use, waste generation, water and wastewater collection and treatment, off-road uses, and other GHG emission sources to meet or exceed the State's goal to achieve carbon neutrality by 2045.

5.3.5 Level of Significance Before Mitigation

Upon implementation of regulatory requirements and standard conditions of approval, some impacts would be less than significant: Impact 5.3-5.

Without mitigation, these impacts would be **potentially significant**:

- **Impact 5.3-1** The additional population growth forecast for the Moorpark General Plan 2050 and the associated emissions would not be consistent with the assumptions of Ventura County's AQMP.
- **Impact 5.3-2** Construction activities associated with future development that would be accommodated under the proposed project could generate short-term emissions in exceedance of the Ventura County APCD's threshold criteria.
- **Impact 5.3-3** Implementation of the Moorpark General Plan 2050 would generate additional, long-term emissions in exceedance of Ventura County APCD's threshold criteria and cumulatively contribute to the South Central Coast Air Basin's nonattainment designations.
- **Impact 5.3-4** The proposed project could expose sensitive receptors to substantial toxic air contaminant concentrations.

5.3.6 Mitigation Measures

Impact 5.3-1

When incorporated into future development projects for operation and construction phases, the mitigation measures outlined for Impacts 5.3-2 and 5.3-3, described below, would contribute to reduced criteria air pollutant emissions associated with buildout of the Moorpark General Plan 2050. Additionally, goals and policies in Moorpark General Plan 2050 would promote increased capacity for alternate transportation modes, implementation of transportation demand management strategies, and energy efficiency. However, no further mitigation measures are available that would reduce impacts to below Ventura County APCD significance thresholds due to the magnitude of growth and associated emissions that would be generated by the buildout of Moorpark General Plan 2050.

Impact 5.3-2

AQ-1 **Construction Phase Air Quality Technical Analysis.** Prior to discretionary approval by the City of Moorpark for development projects subject to review under the California

Environmental Quality Act (CEQA) (i.e., nonexempt projects), project applicants shall prepare and submit a technical assessment evaluating potential project construction-related air quality impacts to the City of Moorpark Community Development Department for review and approval. The evaluation shall be prepared in conformance with Ventura County Air Pollution Control District (APCD) methodology for assessing air quality impacts. If construction-related criteria air pollutants are determined to have the potential to exceed the Ventura County APCD–adopted thresholds of significance, the City of Moorpark shall require feasible mitigation measures to reduce air quality emissions. Potential measures shall be incorporated as conditions of approval for a project and may include:

- Require fugitive dust control measures that exceed Ventura County APCD's Regulation IV, Rule 55, Fugitive Dust, such as:
  - Requiring use of nontoxic soil stabilizers to reduce wind erosion.
  - Applying water every four hours to active soil disturbing activities.
  - Tarping and/or maintaining a minimum of 24 inches of freeboard on trucks hauling dirt, sand, soil, or other loose materials.
- Use construction equipment rated by the United States Environmental Protection Agency as having exhaust emission limits of Tier 4 interim or higher.
- Ensure construction equipment is properly serviced and maintained to the manufacturers' standards.
- Limit nonessential idling of construction equipment to no more than five consecutive minutes.
- Use Super-Compliant VOC paints for coating of architectural surfaces whenever possible.

These identified measures shall be incorporated into all appropriate construction documents (e.g., construction management plans) submitted to the City and shall be verified by the City's Community Development Department.

Impact 5.3-3

AQ 2 **Long-Term Air Quality Technical Analysis.** Prior to discretionary approval by the City of Moorpark for development projects subject to review under the California Environmental Quality Act (CEQA) (i.e., nonexempt projects), project applicants shall prepare and submit a technical assessment evaluating potential project operation-related air quality impacts to the City of Moorpark Community Development Department for review and approval. The evaluation shall be prepared in conformance with Ventura County Air Pollution Control District (APCD) methodology in assessing air quality impacts. If operation-related air pollutants are determined to have the potential to exceed the Ventura County APCD–adopted thresholds of significance, the City of Moorpark shall require that

applicants for new development projects incorporate mitigation measures to reduce air pollutant emissions during operational activities. The identified measures shall be included as conditions of approval. Possible mitigation measures to reduce long-term emissions could include but are not limited to:

- For site-specific development that requires refrigerated vehicles, the construction documents shall demonstrate an adequate number of electrical service connections at loading docks to plug in the anticipated number of refrigerated trailers and reduce idling time and emissions.
- Applicants for manufacturing and light industrial uses shall consider energy storage and combined heat and power in appropriate applications to optimize renewable energy generation systems and avoid peak energy use.
- Site-specific developments with truck delivery and loading areas and truck parking spaces shall include signage as a reminder to limit idling of vehicles while parked for loading/unloading in accordance with California Air Resources Board Rule 2845 (13 CCR Chapter 10 sec. 2485).
- Provide changing/shower facilities as specified in the Nonresidential Voluntary Measures of CALGreen.
- Provide bicycle parking facilities per the Nonresidential Voluntary Measures and Residential Voluntary Measures of CALGreen.
- Provide preferential parking spaces for low-emitting, fuel-efficient, and carpool/van vehicles per the Nonresidential Voluntary Measures of CALGreen.
- Provide facilities to support electric charging stations per the Nonresidential Voluntary Measures and Residential Voluntary Measures of CALGreen.
- Applicant-provided appliances shall be Energy Star–certified appliances or appliances of equivalent energy efficiency (e.g., dishwashers, refrigerators, clothes washers, and dryers). Installation of Energy Star–certified or equivalent appliances shall be verified by the City during plan check.

Impact 5.3-4

AQ-3 **Industrial and Warehouse Development Health Risk Assessments.** Prior to discretionary approval by the City of Moorpark, project applicants for new industrial or warehousing development projects that 1) have the potential to generate 100 or more diesel truck trips per day or have 40 or more trucks with operating diesel-powered transport refrigeration units, and 2) are within 1,000 feet of a sensitive land use (e.g., residential, schools, hospitals, nursing homes), as measured from the property line of the project to the property line of the nearest sensitive use, shall submit a health risk assessment (HRA) to the City of Moorpark Community Development Department for review and approval. The HRA shall be prepared in accordance with policies and procedures of the state Office of

Environmental Health Hazard Assessment and the Ventura County Air Pollution Control District (APCD). If the HRA shows that the incremental cancer risk and/or noncancer hazard index exceeds the respective threshold, as established by the Ventura County APCD at the time a project is considered, the project applicant will be required to identify best available control technologies for toxics (T-BACTs) and appropriate enforcement mechanisms, and demonstrate that they are capable of reducing potential cancer and noncancer risks to an acceptable level. T-BACTs may include but are not limited to restricting idling on-site or electrifying warehousing docks to reduce diesel particulate matter, or requiring use of newer equipment and/or vehicles. T-BACTs identified in the HRA shall be identified as mitigation measures in the environmental document and/or incorporated into the site plan.

5.3.7 Level of Significance After Mitigation

Impact 5.3-1

The proposed project would be inconsistent with the Ventura County's AQMP because buildout under the Moorpark General Plan 2050 would cumulatively contribute to the nonattainment designations of the SCCAB. Incorporation of Mitigation Measures AQ-1 and AQ-2 into future development projects would reduce operation-phase criteria air pollutant emissions associated with buildout of the Moorpark General Plan 2050. Additionally, goals and policies in the General Plan would promote increased capacity for alternate transportation modes. Nevertheless, Impact 5.3-1 would remain ***significant and unavoidable***.

Impact 5.3-2

Buildout in accordance with the proposed project would generate short-term emissions that would exceed Ventura County APCD's regional significance thresholds and cumulatively contribute to the nonattainment designations of the SCCAB. Mitigation Measure AQ-1 and the goals and policies of the Moorpark General Plan 2050 would reduce construction-related air pollutant emissions to the extent feasible. However, individual projects accommodated under the proposed project might exceed the Ventura County APCD's regional significance thresholds. Therefore, construction-related regional air quality impacts of developments that would be accommodated by the proposed project would remain ***significant and unavoidable***.

Impact 5.3-3

Buildout in accordance with the proposed project would generate long-term emissions that would exceed Ventura County APCD's regional significance thresholds and cumulatively contribute to the nonattainment designations of the SCCAB. Mitigation Measure AQ-2, in addition to the goals and policies of the proposed project, would reduce air pollutant emissions to the extent feasible. The measures and policies covering topics such as expansion of the pedestrian and bicycle networks, promotion of public and active transit, and support to increase building energy efficiency and energy conservation would also reduce criteria air pollutants in the city. Further, as shown in Table 5.3-11, *City of Moorpark Criteria Air Pollutant Emissions Forecast Compared to Existing Conditions*, compared to existing baseline year conditions, emissions of NO_X are projected to decrease from current levels despite growth associated with the Moorpark General Plan 2050. However,

Impact 5.3-3 would remain ***significant and unavoidable*** due to the increase in VOCs associated with the proposed project from consumer product use by residential development.

Contributing to nonattainment status would also contribute to worsening health effects associated with these criteria air pollutants. Known health effects related to ozone include worsening of bronchitis, asthma, and emphysema and a decrease in lung function. Health effects associated with particulate matter include premature death of people with heart or lung disease, nonfatal heart attacks, irregular heartbeat, decreased lung function, and increased respiratory symptoms. Reducing emissions would further contribute to reducing possible health effects related to criteria air pollutants.

It is speculative for this broad-based policy plan to determine how exceeding the regional thresholds would affect the number of days the region is in nonattainment since mass emissions are not correlated with concentrations of emissions, or how many additional individuals in the air basin would be affected by the health effects cited above.

Table 5.3-11 City of Moorpark Air Pollutant Emissions Forecast Compared to Existing Conditions

Sector	Criteria Air Pollutant Emissions (pounds per day)			
	VOC	NO_X	PM_{10}	$PM_{2.5}$
Existing (2022 Emission Rates)				
Transportation	25	222	NA	NA
Energy	23	171	NA	NA
Area –Offroad Equipment	121	71	NA	NA
Area – Consumer Products	427	–	–	–
Existing Total	**596**	**463**	**NA**	**NA**
Proposed Project (2050 Emission Rates)				
Transportation	8	69	NA	NA
Energy	127	265	NA	NA
Area –Offroad Equipment	181	102	NA	NA
Area – Consumer Products	711	–	–	–
Proposed Project Total	**1,027**	**436**	**NA**	**NA**
Change from Existing Conditions				
Transportation	-17	-153	NA	NA
Energy	104	94	NA	NA
Area –Offroad Equipment	60	31	NA	NA
Area – Consumer Products	284	–	–	–
TOTAL	**431**	**-27**	**NA**	**NA**

Table 5.3-11 City of Moorpark Air Pollutant Emissions Forecast Compared to Existing Conditions

Sector	Criteria Air Pollutant Emissions (pounds per day)			
	VOC	NO_X	PM_{10}	$PM_{2.5}$
Ventura County APCD Regional Significance Threshold	25	25	NA	NA
Significant?	**Yes**	**No**	**NA**	**NA**

Sources. See Appendix D.
Note: Ventura County APCD only has regional significance thresholds for VOC and NO_X.

This EIR quantifies the increase in criteria air pollutants emissions in the city. However, at a programmatic level analysis, it is not feasible to quantify the increase in TACs from stationary sources associated with the proposed project or meaningfully correlate how regional criteria air pollutant emissions above the Ventura County APCD's significance thresholds correlate with basinwide health impacts.

To determine cancer and noncancer health risk, the location, velocity of emissions, meteorology, and topography of the area as well as the locations of receptors are equally important as model parameters as the quantity of TAC emissions. The white paper in Appendix 5.3-1, "We Can Model Regional Emissions, But Are the Results Meaningful for CEQA," describe several of the challenges of quantifying local effects—particularly health risks—for large-scale, regional projects, and these are applicable to both criteria air pollutants and TACs. Similarly, the two amicus briefs filed by the air districts on the Friant Ranch case (see Appendix D) describe two positions regarding CEQA requirements, modeling feasibility, variables, and reliability of results for determining specific health risks associated with criteria air pollutants. The discussions also include the distinction between criteria air pollutant emissions and TACs with respect to health risks. The following paragraphs summarize major points about the infeasibility of assessing health risks of criteria air pollutant emissions and TACs associated with implementation of a general plan.

To achieve and maintain air quality standards, the Ventura County APCD has established numerical emission indicators of significance for regional and localized air quality impacts of the construction and operational phases of a local plan or project. Ventura County APCD has established the thresholds based on scientific and factual data that is contained in the federal and state Clean Air Acts and recommends that these thresholds be used by lead agencies in making a determination of significance Ventura County APCD 2003). The numerical emission indicators are based on the recognition that the air basin is a distinct geographic area with a critical air pollution problem for which AAQS have been promulgated to protect public health. The thresholds represent the maximum emissions from a plan or project that are expected not to cause or contribute to an exceedance of the most stringent applicable national or state AAQS. By comparing the plan's emissions to the thresholds, an EIR assesses whether these emissions directly contribute to any regional or local exceedances of the applicable AAQS and exposure levels.

Ventura County AQMD currently does not have methodologies that would provide the city with a consistent, reliable, and meaningful analysis to correlate specific health impacts with a proposed project's mass emissions. For criteria air pollutants, exceedance of the regional significance thresholds cannot be used to correlate a project to quantifiable health impacts unless emissions are sufficiently high to use a regional model. Ventura

County AQMD has not provided methodology to assess the specific correlation between mass emissions generated and their effect on health (see Appendix D: San Joaquin Valley Air Pollution Control District's amicus brief, and South Coast Air Quality Management District's amicus brief).

Ozone concentrations depend on a variety of complex factors, including the presence of sunlight and precursor pollutants, natural topography, nearby structures that cause building downwash, atmospheric stability, and wind patterns. Secondary formation of particulate matter and ozone can occur far from sources as a result of regional transport by wind and topography (e.g., low-level jet stream). Photochemical modeling depends on all emission sources in the entire domain (i.e., modeling grid). Low resolution and spatial averaging produce "noise" and modeling errors that usually exceed individual source contributions. Because of the complexities of predicting ground-level ozone concentrations in relation to the National and California AAQS, it is not possible to link health risks to the magnitude of emissions exceeding the significance thresholds.

Current models used in CEQA air quality analyses are designed to estimate potential project construction and operation emissions for defined projects. The estimated emissions are compared to significance thresholds, which are keyed to reducing emissions to levels that will not interfere with the region's ability to attain the health-based standards. This serves to protect public health in the overall region, but there is currently no CEQA methodology to determine the impact of emissions (e.g., pounds per day) on future concentration levels (e.g., parts per million or micrograms per cubic meter) in specific geographic areas. CEQA thresholds, therefore, are not specifically tied to potential health outcomes in the region.

The EIR must provide an analysis that is understandable for decision making and public disclosure. Regional-scale modeling may provide a technical method for this type of analysis, but it does not necessarily provide a meaningful way to connect the magnitude of a project's criteria pollutant emissions to health effects without speculation. Additionally, this type of analysis is not feasible at a general plan level because the location of emissions sources and quantity of emissions are not known. However, because cumulative development in the city would exceed the regional significance thresholds, the proposed project could contribute to an increase in health effects in the basin until the attainment standards are met.

Impact 5.3-4

Buildout of the Moorpark General Plan 2050 could expose sensitive receptors to substantial concentrations of toxic air contaminants. Buildout could result in new sources of criteria air pollutant emissions and/or TACs near existing or planned sensitive receptors. Review of development projects by Ventura County APCD for permitted sources of air toxics (e.g., industrial facilities, dry cleaners, and gasoline dispensing facilities) would ensure that health risks are minimized. Additionally, Mitigation Measure AQ-3 would ensure mobile sources of TACs not covered under Ventura County APCD permits are considered during subsequent project-level environmental review by the City of Moorpark. Individual development projects would be required to achieve the incremental risk thresholds established by Ventura County APCD, and TACs would be less than significant.

However, implementation of the Moorpark General Plan 2050 would generate TACs that could contribute to elevated levels in the air basin. While individual projects would achieve the project-level risk threshold of 10

per million, they would nonetheless contribute to the higher levels of risk in Ventura County as a whole. Therefore, the Moorpark General Plan 2050's cumulative contribution to health risk is ***significant and unavoidable***.

5.3.8 References

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5.4 BIOLOGICAL RESOURCES

This section of the Draft Environmental Impact Report (DEIR) evaluates the potential for implementation of the Moorpark General Plan 2050 to impact biological resources in the City of Moorpark. Cumulative impacts related to biological resources would be within the city boundaries but would consider regional habitat loss in the Southern California region based on the range of the protected species. The analysis in this section is based in part on:

- *Biological Resources Technical Report: Existing Conditions – Final Report*, ECORP Consulting Inc., September 2022.

A complete copy of this report is included as Appendix E to this DEIR.

5.4.1 Environmental Setting

5.4.1.1 REGULATORY BACKGROUND

Federal Regulations

Endangered Species Act

The Federal Endangered Species Act (FESA) protects plants and animals that are listed as endangered or threatened by the United States Fish and Wildlife Service (USFWS) and the National Marine Fisheries Service. Section 9 of FESA prohibits the "take" of endangered wildlife, where take is defined as "harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, collect, or attempt to engage in such conduct" (50 Code of Federal Regulations [CFR] Section 17.3). For plants, this statute governs removing, possessing, maliciously damaging, or destroying any endangered plant on federal land and removing, cutting, digging up, damaging, or destroying any endangered plant on non-federal land in knowing violation of state law (16 US Code [USC] Section 1538). Under Section 7 of FESA, federal agencies are required to consult with the USFWS if their actions, including permit approvals or funding, could adversely affect a listed (or proposed) species (including plants) or its critical habitat. Through consultation and the issuance of a biological opinion, the USFWS may issue an incidental take statement allowing take of the species that is incidental to an otherwise authorized activity provided the activity will not jeopardize the continued existence of the species. Section 10 of FESA provides for issuance of incidental take permits where no other federal actions are necessary provided a habitat conservation plan is developed.

Migratory Bird Treaty Act

Nesting birds are protected under the federal Migratory Bird Treaty Act (MBTA) of 1918 (16 USC Sections 703–711). The MBTA provides protection for resident and migrant nesting birds whether or not they are considered sensitive by resource agencies. The MBTA prohibits take of nearly all native birds. The MBTA makes it unlawful to take, possess, buy, sell, purchase, or barter any migratory bird listed under 50 CFR Section 10, including feathers or other parts, nests, eggs, or products, except as allowed by implementing regulations (50 CFR Section 21). The direct injury or death of a migratory bird due to construction activities

or other construction-related disturbance that causes nest abandonment, nestling abandonment, or forced fledging would be considered take under federal law. The USFWS is responsible for enforcing the MBTA.

Federal Clean Water Act

The federal Clean Water Act (CWA) (33 USC Section 1344 et seq.) provides for the restoration and maintenance of the physical, chemical, and biological integrity of the nation's waters. The United States Army Corps of Engineers (USACE) regulates discharge of dredged or fill material into waters of the United States under Section 404 of the CWA. "Discharges of fill material" is defined as the addition of fill material into Waters of the United States, including, but not limited to the following: placement of fill that is necessary for the construction of any structure, or impoundment requiring rock, sand, dirt, or other material for its construction; site-development fills for recreational, industrial, commercial, residential, and other uses; causeways or road fills; and fill for intake and outfall pipes, and subaqueous utility lines (33 CFR Section 328.2(f)). In addition, Section 401 of the CWA (33 USC Section 1341) requires any applicant for a federal license or permit to conduct any activity that may result in a discharge of a pollutant into Waters of the United States to obtain a certification that the discharge will comply with the applicable effluent limitations and water quality standards.

Waters of the United States that are currently regulated under the CWA include:

- **Wetlands.** Wetlands are "those areas that are inundated or saturated by surface or ground-water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions" (USACE and USEPA 2019). Wetlands can be perennial, intermittent, or adjacent to other waters.

- **Other Waters.** Other waters that may be identified in the site are nontidal, perennial, and intermittent watercourses and tributaries to such watercourses (USACE and USEPA 2019). The limit of USACE jurisdiction for nontidal watercourses (without adjacent wetlands) is defined in 33 CFR Section 328.4(c)(1) as the "ordinary high-water mark" (OHWM). The OHWM is defined as the "line on the shore established by the fluctuations of water and indicated by physical characteristics such as clear, natural line impressed on the bank, shelving, changes in the character of soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding areas" approximation of the lateral limit of USACE jurisdiction. The upstream limits of other waters are defined as the point where the OHWM is no longer perceptible.

Substantial impacts to wetlands (over 0.5 acre) may require an individual permit. Projects that only minimally affect wetlands (less than 0.5 acre) may meet the conditions of one of the existing nationwide permits. A water quality certification or waiver pursuant to Section 401 of the CWA is required for Section 404 permit actions; this certification or waiver is issued by one of nine Regional Water Quality Control Boards (RWQCB) that operate under the State Water Resources Control Board. Moorpark is in the jurisdiction of the Los Angeles (Region 4) RWQCB.

State Regulations

California Endangered Species Act

The California Endangered Species Act (CESA) generally parallels the main provisions of FESA, but unlike its federal counterpart, CESA extends the take prohibitions to species proposed for listing (called "candidates"). Section 2080 of the California Fish and Game Code (CFGC) prohibits the taking, possession, purchase, sale, and import or export of endangered, threatened, or candidate species, unless otherwise authorized by permit or in the regulations. Take is defined in Section 86 of the CFGC as "hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill." CESA allows for take incidental to otherwise lawful development projects. State lead agencies are required to consult with the California Department of Fish and Wildlife (CDFW) to ensure that any action they undertake is not likely to jeopardize the continued existence of any endangered or threatened species or result in destruction or adverse modification of essential habitat.

Fully Protected Species

The State of California first began to designate species as "fully protected" prior to the creation of CESA and FESA. Lists of fully protected species were initially developed to provide protection to animals that were rare or faced possible extinction, and included fish, amphibians and reptiles, birds, and mammals. Most fully protected species have since been listed as threatened or endangered under CESA and/or FESA. The regulations that implement the Fully Protected Species Statute (CFGC Section 4700) provide that fully protected species may not be taken or possessed at any time. Furthermore, CDFW prohibits any state agency from issuing incidental take permits for fully protected species, except for necessary scientific research.

Native Plant Protection Act

The Native Plant Protection Act of 1977 (CFGC Sections 1900–1913) was created with the intent to "preserve, protect, and enhance rare and endangered plants in this State" and is administered by CDFW. The Fish and Wildlife Commission has the authority to designate native plants as "endangered" or "rare" and to protect endangered and rare plants from take. The CESA of 1984 (CFGC Sections 2050–2116) provided further protection for rare and endangered plant species, but the Native Plant Protection Act remains part of the CFGC.

California Fish and Game Code Section 1600

Under Section 1602 of the CFGC, the CDFW regulates activities that may (1) divert, obstruct, or change the natural flow or change the bed, channel, or bank of any river, stream, or lake; (2) use materials from streambeds; or (3) result in the disposal or deposition of debris, waste, or other material containing crumbled, flaked, or ground pavement where it can pass into any river, stream, or lake. It should be noted that in the California Code of Regulations, a streambed is defined as "a body of water that flows at least periodically or intermittently through a bed or channel having banks and supporting fish or other aquatic life" (Title 14, Section 1.72). The definition further states "This includes watercourses having a surface or subsurface flow that supports or has supported riparian vegetation." This definition does not supersede or replace the definition in Section 1602 but adds to it.

Regulated activities require submittal of a Notification of Lake or Streambed Alteration to CDFW. CDFW reviews the proposed actions and, if necessary, submits to the applicant a proposal for measures to protect affected fish and wildlife resources. The final proposal that is mutually agreed upon by CDFW and the applicant is the Streambed Alteration Agreement. Often, projects that require a Streambed Alteration Agreement also require a permit from the USACE under Section 404 of the CWA. In these instances, the conditions of the Section 404 permit and the Streambed Alteration Agreement may overlap.

California Fish and Game Code Sections 3503, 3503.5, 3511, and 3513

Several sections of the CFGC provide for the protection of native birds and raptors. Section 3503 prohibits the take, possession, or needless destruction of the nest of eggs or any bird, except as otherwise provided by the code, and all raptor species are protected from take pursuant to Section 3503.5. Section 3511(a)(1) specifies that fully protected birds or parts thereof may not be taken or possessed at any time. Section 3513 prohibits the possession or take of any migratory nongame birds listed under the MBTA. These sections mandate the protection of California nongame native birds' nests and also make it unlawful to take these birds.

California Fish and Game Code Section 4150

A mammal occurring naturally in California that is not a game mammal, fully protected mammal, or fur-bearing mammal is a nongame mammal. Bats are considered nongame mammals and are afforded protection by state law from take and/or harassment. Any activities resulting in bat mortality (e.g., the destruction of an occupied bat roost that results in the death of bats), disturbance that causes the loss of a maternity colony of bats (resulting in the abandonment and subsequent death of young), or various modes of nonlethal pursuit or capture may be considered take as defined in Section 86 of the California Fish and Game Code. In addition, impacts to bat maternity colonies, which are considered native wildlife nursery sites, could be considered significant under CEQA.

California Fish and Game Code Section 4800

The mountain lion (genus Puma) is a specially protected mammal under the laws of this state. It is unlawful to take, injure, possess, transport, import, or sell a mountain lion or a product of a mountain lion, except as specifically provided in Chapter 10 of Division 4 Part 3 (Mammals) or in Division 3 Chapter 2 (Importation, Transportation, and Sheltering of Restricted Live Wild Animals).

Porter Cologne Water Quality Control Act

The RWQCB implements water quality regulations under the federal CWA and the Porter-Cologne Water Quality Act. These regulations require compliance with the National Pollutant Discharge Elimination System (NPDES), including compliance with the California Storm Water NPDES Construction General Permit for discharges of stormwater runoff associated with construction activities. Construction general permits for projects that disturb one or more acres of land require development and implementation of a Storm Water Pollution Prevention Plan. Under the Porter-Cologne Water Quality Act, the RWQCB regulates actions that

would involve "discharging waste, or proposing to discharge waste, with any region that could affect the water of the state" (Water Code Section 13260(a)).

Waters of the State are defined as "any surface water or groundwater, including saline waters, within the boundaries of the state" (Water Code Section 13050(e)). The RWQCB regulates all such activities, as well as dredging, filling, or discharging materials into waters of the State that are not regulated by the USACE due to a lack of connectivity with a navigable water body. The RWQCB may require issuance of Waste Discharge Requirements for these activities.

On April 2, 2019, the State Water Resources Control Board adopted the State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State (referred to as the Procedures) for inclusion in the Water Quality Control Plan for Inland Surface Waters, Enclosed Bays, and Estuaries of California (Resolution No. 2019-0015). The new procedures include:

- Definition of wetlands and aquatic resources that are waters of the State.
- Description of application requirements for individual orders (not general orders) for water quality certification, or waste discharge requirements.
- Description of information required in compensatory mitigation plans.
- Definition of exemptions to application procedures.

The Office of Administrative Law approved the procedures on August 28, 2019, and the rule went into effect May 28, 2020.

Regional Regulations

Ventura County Fire Protection District Ordinance Number 31

The Ventura County Fire Department is responsible for the protection of lives and property in the county. Its area of jurisdiction includes all unincorporated areas of Ventura County as well as the cities of Camarillo, Moorpark, Ojai, Port Hueneme, Simi Valley, Thousand Oaks, and Santa Paula. Per California Fire Code Section 304.1.2 (Vegetation) clearance requirements in wildland-urban interface fire areas, hazardous fire areas and any other parcels declared a public nuisance by the fire code official shall be in accordance with Appendix W of the California Fire Code. In addition, properties within said areas would be subject to guidelines provided in Appendix V (Fire Safety Provisions for Hazardous Fire Areas):

- **California Fire Code, Appendix V, Section V108.1.** New structures and additions to existing structures shall not be constructed less than 100 feet (30,480 mm) from any protected habitat, whether on the same or adjacent parcels, where the 100-foot (30,480 mm) defensible space required under Appendix W cannot be provided, unless an alternate method of construction and protection is provided that can ensure the safety of the structure and emergency responders as approved by the Fire Code Official. Protected habitat includes lands restricted from brush clearance or modification due to federal or state listed endangered species.

- **California Fire Code, Appendix W, Section W105.1.** Minimum 100-foot defensible space zone around each qualifying structure (excluding single specimens or stands of protected species of trees, ornamental landscape, or similar plants used in landscaping and ground covers, provided that they do not form a means of rapidly transmitting a fire from the native growth to any building and are in accordance with the requirements of Defensible Space and Fuel Modification Standards as issued and approved by the Fire Code Official).

- **California Fire Code, Appendix W, Section W106.2.1.** Removal of slash, snags, vegetation that may grow into overhead electrical lines, other ground fuels, ladder fuels and dead trees, and the thinning of live trees.

- **California Fire Code, Appendix W, Section W106.4.** Continuous maintenance of the approved Fuel Modification zone at all times.

Per Section 105.7.26 (Fuel Modification plans) of the VCFD Fire Code, a construction permit is required for installation of or modification to a Fuel Modification zone located within a hazardous fire area, wildland-urban interface zone, or fire hazard severity zone.

Local Regulations

Several ordinances in the Moorpark Municipal Code provide regulations to protect trees, native plants, and other biological resources within the city limits (see also Appendix E).

- **Tree Preservation.** Section 12.08.010 of the municipal code identifies guidelines for the preservation, cutting, and removal of historic trees, native oak trees, and mature trees. In addition, Section 12.12.010 protects and preserves, to the greatest extent possible, mature trees, native oak trees, and historic trees, especially where such trees are associated with proposals for urban development, as such trees are a significant, historical, aesthetic, and valuable ecological resource.

- **Hillside Management.** The City requires submittal of a biological resources report for discretionary projects in hillside areas pursuant to Section 17.38.050 of the municipal code. In hillside areas, habitat and the potential presence of any sensitive habitat and unique, rare, or endangered plant or animal species is required to be identified and mapped.

- **Moorpark Highland Specific Plan Habitat Conservation Plan.** The municipal code has specific requirements for development in the Moorpark Highlands Specific Plan (Chapter 17.74). Section 17.74.050 allows for limited improvements within private open space areas and prohibits all development (including structures and trails) within the natural open space, except what is required for remedial grading and arterial roadway construction. In addition, the zoning code established a habitat conservation plan for the natural open space zone areas, which are required to remain ungraded and shall not be developed, with the exception of roadway and infrastructure improvements necessary for the construction of Spring Road.

5.4.1.2 EXISTING CONDITIONS

Vegetation Communities and Other Land Cover Types

A review of the County's GIS database of vegetation cover was conducted to determine general vegetation communities that occur within the city limits. The county layer combines numerous vegetation/land cover maps that have been created for parts of Ventura County, at different scales, using different classification schemes to create one GIS vegetation/land cover database and map. The county mapping layer uses the currently accepted vegetation classification system (the National Vegetation Classification Standard [NVCS]). Vegetation communities mapped within the city limits were overlaid on recent aerial imagery, boundaries were adjusted or changed to a different cover type, and communities were generalized. A field verification survey of vegetation communities and land cover types was not conducted.

Table 5.4-1, *Vegetation Communities and Other Land Cover Types Mapped in Moorpark*, lists the vegetation communities within Moorpark; other land cover types; general acreages within Moorpark; and the State Conservation Ranking (CA Rank). The generalized communities and land cover types are shown in Figure 5.4-1, *Vegetation Communities*, and described below in alphabetical order.

Table 5.4-1 Vegetation Communities and Other Land Cover Types Mapped in Moorpark

Vegetation Community/Land Cover		CA Rank	Amount (acres)
Scientific Name	**Common Name**		
Agriculture			**281.7**
–	Agriculture		
Alluvial Scrub			**14.9**
Lepidospartum squamatum	Scale broom scrub	S3	
–	Streambed		
Channel			**6.4**
–	Developed	–	
–	Urban/Disturbed or Built-Up		
Chaparral			**12.0**
Adenostoma fasciculatum	Chamise chaparral	S5	
Adenostoma fasciculatum – Salvia mellifera	Chamise – black sage chaparral	S4	
Developed			**4436.6**
–	Developed	–	
–	Postfire or postclearing regeneration unidentifiable shrubs	–	
–	Urban/disturbed or built-up	–	
Disturbed			**345.4**
–	Cleared land	–	
–	Native and nonnative herbaceous Mapping Unit	–	
–	Urban – herbaceous/cleared	–	
Eucalyptus Woodland			**1.5**
Eucaylptus spp.	Eucalyptus groves	–	
Mixed Scrub			**1894.9**
Artemisia californica	California sagebrush scrub	S4	

Table 5.4-1 Vegetation Communities and Other Land Cover Types Mapped in Moorpark

Vegetation Community/Land Cover		CA Rank	Amount (acres)
Scientific Name	**Common Name**		
Artemisia californica – Eriogonum fasciculatum	California sagebrush – California buckwheat scrub	S4	
Artemisia californica – Salvia leucophylla	California sagebrush – purple sage scrub	S4	
Artemisia californica – Salvia mellifera	California sagebrush – black sage scrub	S4	
Baccharis pilularis	Coyote brush scrub	S5	
Baccharis pilularis alliance	Coyote brush scrub	S5	
Encelia californica	California brittle bush scrub	–	
Eriogonum fasciculatum	California buckwheat scrub	S5	
Lotus scoparius	Deer weed scrub	S5	
Malosma laurina	Laurel sumac scrub	S4	
Malosma laurina alliance	Laurel sumac scrub	S4	
Opuntia littoralis alliance	Coast prickly pear scrub	S3	
Opuntia spp.	Coast prickly pear scrub	S3	
Rhus integrifolia	Lemonade berry scrub	S3	
–	Rock outcrop Mapping Unit	–	
Salvia leucophylla	Purple sage scrub	S4	
Salvia leucophylla alliance	Purple sage scrub	S4	
Salvia mellifera1	Black sage scrub	S4	
Salvia mellifera – Salvia leucophylla alliance	Sage scrub	S4	
Native Bunchgrass Grassland			**167.2**
Nassella pulchra	Purple needlegrass grassland	–	
Oak Woodland			**138.6**
Quercus agrifolia	Coast live oak woodland and forest	S4	
Quercus agrifolia alliance	Coast live oak woodland and forest	S4	
Open Water			**7.0**
–	Water	–	
Ornamental			**168.7**
–	Exotic trees undifferentiated	–	
Schinus molle	Peppertree groves	–	
Landscaped			**279.2**
–	Predominantly shrubs/herbaceous on artificial cuts/embankments	–	
–	Urban - shrub	–	
Riparian			**237.1**
Arundo donax	Giant reed marsh	–	
Baccharis salicifolia	Mulefat thickets	S4	
Baccharis salicifolia alliance	Mulefat thickets	S4	
Platanus racemosa	California sycamore woodlands	S3	
Platanus racemosa alliance	California sycamore woodlands	S3	
–	Riverine, lacustrine, and tidal mudflat mapping unit	–	
Salix laevigata – Salix lasiolepis	Willow riparian woodlands	–	

Table 5.4-1 Vegetation Communities and Other Land Cover Types Mapped in Moorpark

Vegetation Community/Land Cover		CA Rank	Amount (acres)
Scientific Name	Common Name		
Salix lasiolepis	Arroyo willow thickets	S4	
–	Unknown riparian	–	

Source: ECORP 2022.
State Rank Designations:
S1: Critically Imperiled – extreme rarity (often 5 or fewer populations) or because of factors, such as very steep declines, making it especially vulnerable to extirpation from California.
S2: Imperiled – rarity due to very restricted range, very few populations (often 20 or fewer), steep declines, or other factors making it vulnerable to extirpation California.
S3: Vulnerable – restricted range, relatively few populations (often 80 or fewer), recent and widespread declines, or other factors making it vulnerable to extirpation from the state.
S4: Apparently Secure – uncommon, but not rare, in California
S5: Secure – common, widespread, and abundant in California

- **Agriculture.** Areas mapped as Agriculture include crop fields and orchards. This vegetation type occurs in various locations throughout Moorpark. Some areas mapped as Agriculture are within electrical transmission line corridors.

- **Alluvial Scrub.** Alluvial Scrub is mapped in certain stream courses of Moorpark. These areas vary from being unvegetated or contain alluvial fan sage scrub species, such as scale broom (*Lepidospartum squamatum*). The substrate of Alluvial Scrub areas is sandy to cobbly.

- **Channel.** Channels occur throughout Moorpark. These are mostly concrete lined, but some have banks that are lined with riprap. Standing water occurs in some channels but others are dry.

- **Chaparral.** Areas mapped as Chaparral are mainly present in the eastern section of Moorpark. The Chaparral vegetation community is mainly dominated by chamise (*Adenostoma fasciculatum*), with black sage (*Salvia mellifera*) as a co-dominant species for some locations. Chaparral is mostly present in open natural areas, away from developed locations.

- **Developed.** The majority of Moorpark is mapped as Developed. These areas consist of commercial, industrial, and residential structures and associated landscaping. Paved roads are also included in this mapping unit.

- **Disturbed.** Disturbed areas occur throughout Moorpark. They primarily comprise areas with exposed soil with little or no vegetation. Some of these areas have been disturbed in the past and are now vegetated with a mix of native and nonnative herbaceous plant and grass species.

- **Eucalyptus Woodland.** Eucalyptus Woodland occurs in one location in the southern extent of Moorpark. The trees are adjacent to a residential neighborhood and are scattered throughout a relatively small area (1.5 acres). To the south of this location are rural homes and agricultural areas.

- **Landscaped.** Areas mapped as Landscaped occur throughout Moorpark. Landscaped areas generally include areas adjacent to homes and structures and mainly comprise a mix of low-growing native and

nonnative species. These areas are typically maintained and irrigated. Certain Landscaped areas include cut slopes adjacent to major thoroughfares, which are typically only irrigated until revegetated.

- **Mixed Scrub.** Mixed Scrub has been mapped throughout Moorpark, in small patches and also in large contiguous areas. The dominant species for this vegetation type include California sagebrush (*Artemisia californica*), California brittle bush (Encelia californica), California buckwheat (*Eriogonum fasciculatum*), laurel sumac (*Malosma laurina*), prickly-pear cactus (*Opuntia littoralis*), purple sage (*Salvia leucophylla*), black sage, and lemonade berry (*Rhus integrifolia*). Mixed Scrub areas typically include various levels of cover by nonnative vegetation.

- **Native Bunchgrass Grassland.** This group includes native and nonnative annual forb/grass vegetation as well as native perennial grasslands growing in the California Mediterranean climate. Areas mapped as Native Bunchgrass Grassland are primarily located in the northeastern section of Moorpark. Native Bunchgrass Grassland is dominated by purple needlegrass (*Nassella pulchra*), with other native and nonnative herbaceous and grass species. This vegetation type is present both adjacent to urban housing development as well as within open space (natural) areas.

- **Oak Woodlands.** Areas mapped as Oak Woodlands primarily exist in the northern and eastern sections of Moorpark. Coast live oak (*Quercus agrifolia*) is the dominant oak species for this vegetation type. The distribution of oaks in these areas is somewhat dense to sparse, and the understory comprises a variety of plant types. Typically, the understory is dominated by grasses and herbaceous plants; however, shrubs may be co-dominant in some areas.

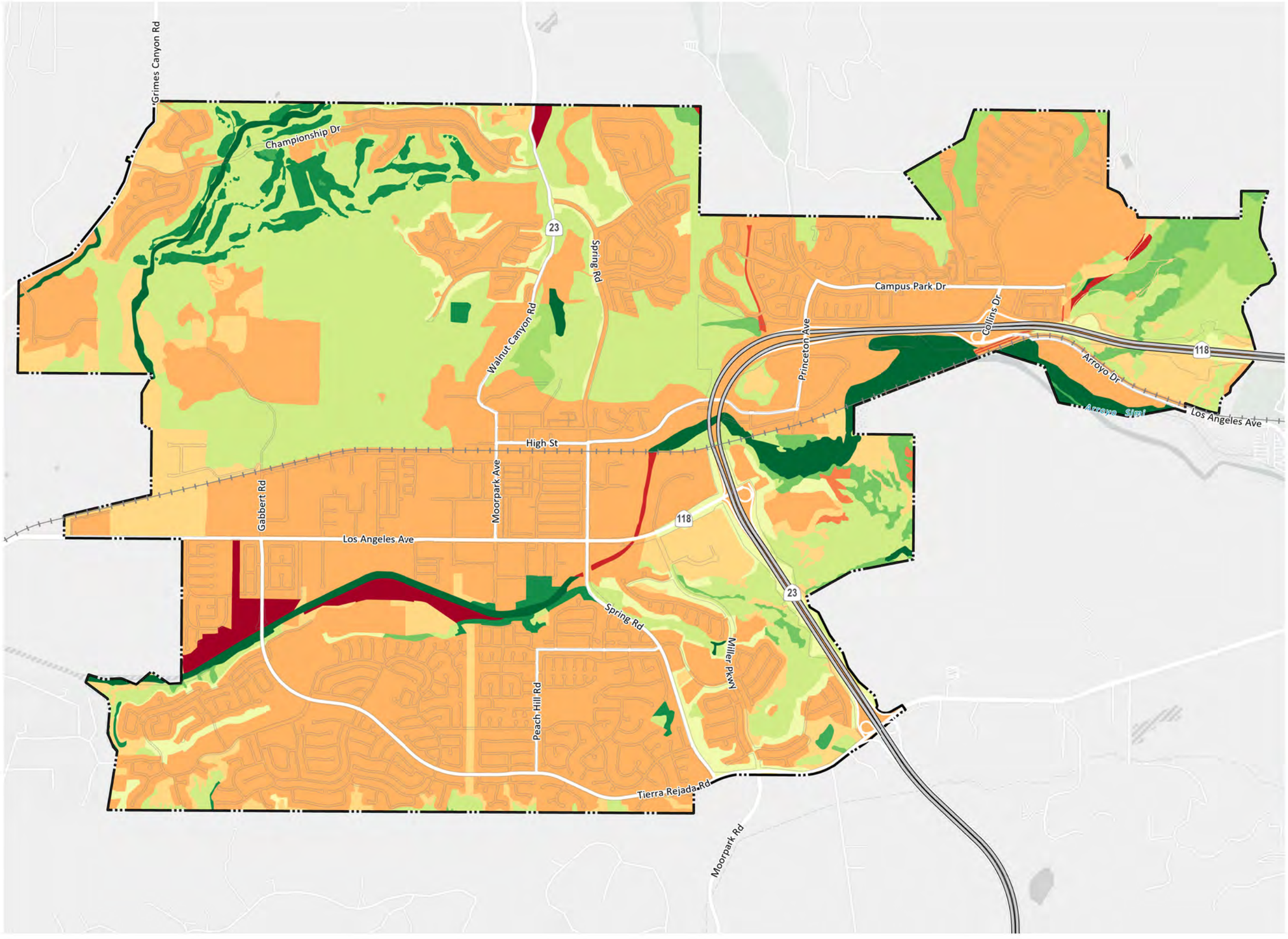
- **Open Water.** Open Water occurs in just a few areas of Moorpark. Golf course water features were also included in this mapping unit. Open water may be present in some areas mapped as Riparian or Channel, but these areas were not mapped as Open Water.

- **Ornamental.** Ornamental vegetation occurs throughout Moorpark and is generally associated with urban housing developments and parkways. Areas mapped as Ornamental also include recreational areas (e.g., golf courses, parks, sports fields). Vegetation in these areas is varied and typically dominated by nonnative species, with some locations comprising native or a mix of native/nonnative species.

- **Riparian.** Areas mapped as Riparian occur throughout Moorpark and are associated with creeks, streambeds, earthen-bottom channels, and certain other depressional features that are subjected to urban runoff. Riparian includes a variety of vegetation communities that include woodland, scrub, thickets, and emergent freshwater marsh. Representative riparian species included in this vegetation category include mulefat (*Baccharis salicifolia*), western sycamore (*Platanus racemosa*), arroyo willow (*Salix lasiolepis*), and nonnative giant reed (*Arundo donax*).

Figure 5.4-1

Vegetation Communities



City Boundary

Railroad

Vegetation Communities

- Agriculture
- Alluvial Scrub
- Channel
- Chaparral
- Developed
- Disturbed
- Eucalyptus Woodland
- Landscaped
- Mixed Scrub
- Native Bunchgrass Grassland
- Oak Woodland
- Open Water
- Ornamental
- Riparian

MADE BY MOORPARK General Plan 2050

Draft Environmental Impact Report

0 1,000 2,000 4,000 FT

Source: PlaceWorks, 2022

Date: 9/27/2022

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Special-Status Biological Resources

For the purpose of this assessment, special-status biological resources are defined as:

- Vegetation communities that are unique, or with relatively limited distribution, or of particular value to wildlife.
- Plant and animal species that have been designated as rare, threatened, or endangered by CDFW or the USFWS and are protected under either the CESA or FESA.
- Plant and animal species being considered or proposed for listing under CESA or FESA.
- Plant and animal species that are of expressed concern to resource and regulatory agencies or local jurisdictions.

Sensitive Natural Communities

Five sensitive vegetation communities were identified by CDFW's California Natural Diversity Database (CNDDB) in the Moorpark and Simi topographic quadrangles (see Appendix B, CNDDB, CNPS, and IPaC Database Search Results, of Appendix E of the DEIR). Sensitive vegetation communities identified in the CNDDB utilize Holland vegetation community names, and most do not directly coincide with the currently accepted NVCS system. Five additional sensitive vegetation communities were mapped within the vicinity of Moorpark by the county's vegetation cover GIS database, which uses the NVCS system. Individual project surveys would be required to conduct project-level mapping utilizing the NVCS system to determine the extent of sensitive vegetation communities in Moorpark. These sensitive communities are described below.

California brittlebush scrub alliance is characterized by a sparse to intermittent shrub layer with a dominance of California brittlebush. Other characteristic shrubs include burrobush (*Ambrosia dumosa*), California sagebrush, and ephedras (*Ephedra spp.*). The herbaceous cover is sparse and is typically composed of annuals. Stands are found at elevations between 200 and 1,000 meters on various landforms and often found on south- to west-facing aspects along upper bajadas and lower mountain slopes, usually in rocky substrates.

California sycamore woodland alliance is a riparian woodland dominated by California sycamores with wetland understory indicators. Other trees present may include coast live oak, white alder (*Alnus rhombifolia*), California walnut (*Juglans californica*), Fremont cottonwood (*Populus fremontii*), California laurel (*Umbellularia californica*), and willows (*Salix spp.*). This vegetation community occurs at elevations between 0 and 2,400 meters and is found in gullies, intermittent streams, springs, seeps, streambanks, and terraces adjacent to floodplains that are subject to flooding and seasonal saturation. Soils are rocky or cobbly alluvium with permanent moisture at depth.

California walnut woodland is a Holland vegetation community described as an open tree canopy that is locally dominated by Southern California black walnut (*Juglans californica*). The open tree canopy allows development of a grassy understory. This community would be the equivalent of California walnut groves: *Juglans californica* alliance, which is not currently mapped within Moorpark at the county review level.

California walnut woodland is mapped within the southeast corner and near the eastern boundary of the West Point Homes Specific Plan area.

Coastal prickly pear succulent scrub alliance is characterized by a shrub community with an intermittent or continuous canopy less than two meters in height, dominated by coast prickly pear species. Other characteristic shrubs include California sagebrush, California buckwheat, black sage, and Mexican elderberry (*Sambucus mexicana*). This alliance occurs at elevations below 1,200 meters and is often found on steep, south-facing slopes and headlands with low water-holding capacity.

Lemonade berry scrub alliance is characterized by a two-tiered, open to continuous shrub canopy, dominated by lemonade berry. Other shrub associates may include California sagebrush, California buckwheat, and cacti. Scattered species of trees may include California walnut and coast live oak. The herbaceous layer is open. This shrubland occurs on gentle to abrupt slopes, at elevations between 5 to 750 meters.

Scale broom scrub alliance has an open to continuous shrub community less than seven meters in height and dominated by scale broom and a variable, grassy herbaceous layer. Other characteristic shrubs include California buckwheat, rabbitbrush (*Ericameria palmeri*), and laurel sumac. This alliance is found in alluvial deposits along washes, river terraces, and alluvial fans below 1,500 meters.

Southern willow scrub is a Holland vegetation community described as a dense, broad-leafed, winter-deciduous riparian thicket dominated by several willow species with scattered emergent cottonwood and sycamores. Most stands are too dense to allow much understory development. This community requires repeated flooding to prevent succession to riparian woodland habitat. It would currently be categorized as any of the specific Salix-dominated communities. Although not mapped within Moorpark at the county review level, this community has potential to occur along the nonchannelized portions of the various drainages and washes since it has been previously identified by the database search in the Moorpark vicinity.

Southern riparian scrub is a Holland vegetation community and a generalized plant community that occurs in association with watercourses and water bodies. The representative plant species are typically well adapted to a hydrological regime ranging from semipermanent inundation to occasional soil saturation on or near the surface during at least a portion of the growing season. This community typically consists of a relatively dense tangle of broad-leaved, winter-deciduous riparian thickets. This community is currently categorized as California rose briar patches (*Rosa californica* shrubland alliance) and pepper tree and Myoporum groves (*Schinus [molle, terebinthifolius] – Myoporum laetum* forest and woodland seminatural alliance). Although not mapped within Moorpark at the county review level, this community has potential to occur along the nonchannelized portions of the various drainages and washes since it has been previously identified by the database search in the Moorpark vicinity.

Southern coast live oak riparian forest is a Holland vegetation community described as an open, locally dense evergreen sclerophyllous riparian woodland dominated by coast live oak. This type of habitat appears to be richer in herbs and poorer in understory shrubs compared to other communities and is distinct from the central coast live oak riparian forest. This habitat can be found in canyons and valleys of coastal southern California, mostly south of Point Conception.

Valley oak woodland was identified by the CNDDB as a Holland vegetation community, described as a relatively open woodland with a grassy-savannah understory and, where dominated by valley oak (*Q. lobata*), that is typically the only tree present. This community is the equivalent of the Valley Oak Woodland—*Quercus lobata* Alliance, which is not currently mapped within Moorpark at the county review level.

Special-Status Plants

Special-status plant species include those classified as endangered or threatened, proposed or candidate species for listing by the USFWS or CDFW; monitored by CNPS; and considered to be those in the greatest need of conservation. Plant species with a documented occurrence within the City of Moorpark and considered to be a County of Ventura locally important species (Appendix C) are also included.

Thirty three special-status plant species known to occur in the vicinity of Moorpark were identified. In addition, three species whose ranges include the Moorpark area were identified by the informal USFWS IPaC search. Results of the CNDDB, CNPS, and USFWS IPaC database searches are included as Appendix B of the Biological Resources Report (See Appendix E of the DEIR). Table 5.4-2, *Special Status Species Known to Occur in the Moorpark Vicinity*, summarizes the special-status plant species, associated habitats, and designated critical habitat within Moorpark.

Table 5.4-2 Special Status Species Known to Occur in the Moorpark Vicinity

Species	Status			Occurrence Information (Year Recorded)	Critical Habitat
	Fed	CA	Other		
Acmispon parviflorus hill lotus	–	–	LIS	Historically reported in the Big Mountain foothills, just northeast of Moorpark (1861)	–
Ammannia robusta grand redstem	–	–	LIS	Reported in the Tierra Rejada Vernal Pool Preserve, Moorpark (1996 and 2011)	–
Arenaria paludicola marsh sandwort	END	END	CNPS 1B.1	No records occur within Ventura County, but Moorpark is within the USFWS "known or expected range" for this species	–
Astragalus pomonensis Pomona milkvetch	–	–	LIS	Reported in Arroyo Simi, Moorpark (2011); and Big Mountain, north of Moorpark (2002)	–
Calochortus catalinae Catalina mariposa lily	–	–	CNPS 4.2	Reported in multiple locations along the Big Mountain foothills, north of Moorpark (1934, 2003, and 2019); the Tierra Rejada Valley southeast of Moorpark (1998); and historically reported west of Moorpark (1947). "Observed to be scattered throughout the coastal sagebrush habitat on the project site" by the Carlsberg Specific Plan EIR (1992)	–
Calochortus clavatus var. clavatus club-haired mariposa lily	–	–	CNPS 4.3	Reported east of Long Canyon, west of Moorpark (2019)	–

5. Environmental Analysis
BIOLOGICAL RESOURCES

Table 5.4-2 Special Status Species Known to Occur in the Moorpark Vicinity

Species	Status			Occurrence Information (Year Recorded)	Critical Habitat
	Fed	CA	Other		
Calochortus clavatus var. gracilis slender mariposa-lily	-	-	CNPS 1B.2	Clifton Smith Herbarium specimen collected from "burned hills around Matllija Nursery in 2004	-
Calochortus plummerae Plummer's mariposa lily	–	–	CNPS 4.2 LIS	Reported in Oak Park, just east of Moorpark (2004); north of Bard Lake, just west of Simi Valley (2007); and at the Simi Valley Landfill, north of Simi Valley (1998)	–
Cardionema ramosissimum sand mat	–	–	LIS	Reported in Happy Camp Canyon Park, north of Moorpark (2011); and Oak Ridge, north of Moorpark (2000)	–
Carex fracta fragile-sheathed sedge	–	–	LIS	Potentially present	–
Carex rossii Ross sedge	–	–	LIS	Reported in Happy Camp Canyon Park, north of Moorpark (2011)	–
Chaenactis glabriuscula var. megacephala big-flowered yellow pincushion	–	–	LIS	Reported in Happy Camp Canyon Park, north of Moorpark (2008)	–
Chamaesyce melanadenia red-gland spurge	–	–	LIS	Reported in Happy Camp Canyon Park, north of Moorpark (2003)	–
Clarkia purpurea ssp. viminea large purple clarkia	–	–	LIS	Historically reported in the Big Mountain foothills, northeast of Moorpark (1916)	–
Convolvulus simulans small-flowered morning glory	–	–	CNPS 4.2	Reported in the Big Mountain foothills, northeast of Moorpark (2019); in the Tierra Rejada Valley, southeast of Moorpark (2003); and north of Canada Park, southeast of Moorpark (1998)	–
Diplacus rutilus red sticky bush monkeyflower	–	–	LIS	Historically reported in Moorpark (1916); north of Moorpark (2020); and Simi Valley (2020)	–
Dudleya parva Conejo dudleya	THR	–	CNPS 1B.2 LIS	Reported in the Tierra Rejada Valley, southeast of Moorpark (1998); and just west of Simi Valley (1988)	–
Eriogonum thurberi Thurber's wild buckwheat	–	–	LIS	Reported in multiple locations along the foothills of Big Mountain, northeast of Moorpark (2003)	–
Euphorbia polycarpa var. hirtella hairy golondrina	–	–	LIS	Reported in the Arroyo Simi and in multiple locations in the Tierra Rejada Valley, Moorpark (2007, 2011, and 2019 records); and in Happy Camp Canyon Park, north of Moorpark (2002 and 2008)	–
Horkelia cuneata var. puberula mesa horkelia	–	–	CNPS 1B.1	Reported along the Arroyo Simi, Moorpark (2011); west of Happy Camp Canyon Park, Moorpark (1995); and in the Big Mountain area; northeast of Moorpark (2002)	–

Table 5.4-2 Special Status Species Known to Occur in the Moorpark Vicinity

Species	Status			Occurrence Information (Year Recorded)	Critical Habitat
	Fed	CA	Other		
Juglans californica Southern California black walnut	-	-	CNPS 4.2	Known to occur within the Hitch Ranch Specific Plan area (2022)	-
Juncus acutus ssp. leopodii southwestern spiny rush	-	-	CNPS 4.2	UCSB Specimen collected in 1991 from along Arroyo Simi in Moorpark	-
Lupinus paynei Payne's bush lupine	–	–	CNPS 1B.1	Reported near Oak Park, Sime Valley (2008); and in Grimes Canyon, north of Moorpark (2008)	–
Marsilea vestita ssp. vestita hairy pepperwort	–	–	LIS	Reported in the Tierra Rejada Valley, Moorpark (2011)	–
Monardella hypoleuca ssp. hypoleuca white-veined monardella	-	-	CNPS 1B.3	Returned by CNPS literature review of Simi and Moorpark quadrangles, but no records found within Plan Area.	-
Monardella sinuata ssp. gerryi Gerry's curly-leaved monardella	–	–	CNPS 1B.1	Reported in Los Posas Hills, southwest of Moorpark (2013 and 2015); and in the Santa Rosa Valley (1976)	–
Mucronea californica California spineflower	–	–	CNPS 4.2 LIS	Reported in Moorpark (1995); Big Mountain foothills, north of Moorpark (2003); and the Las Posas Hills, southwest of Moorpark (2013)	–
Navarretia fossalis spreading navarretia	THR	–	CNPS 1B.1	No records occur within Ventura County, but Moorpark is within the USFWS "known or expected range" for this species	Moorpark does not contain designated Critical Habitat for this species.
Orcuttia californica California Orcutt grass	END	END	CNPS 1B.1 LIS	Reported in the Tierra Rejada Vernal Pool Preserve, Moorpark (1992, 2005, and 2011); and the Tierra Rejada Valley, southeast of Moorpark (2003). Determined present in the southeastern portion of the Carlsberg Specific Plan area in the EIR (1992)	–
Pentachaeta lyonii Lyon's pentachaeta	END	END	CNPS 1B.1	Reported in the Tierra Rejada Vernal Pool Preserve, Moorpark (1991,1995, 1997, 2004, 2005, 2007, 2008, and 2011); north of Tierra Rejada Golf Club, east of Moorpark (1991); and just west of Simi Valley (1989, 1998, and 1994). Determined present in the southeastern portion of the Carlsberg Specific Plan area in the EIR (1992)	Designated Critical Habitat for this species (Unit 1: Simi Valley Unit) is located within Moorpark.
Quercus palmeri Palmer's oak	–	–	LIS	Reported in the Big Mountain foothills, north of Moorpark (2002 and 2003); and Sunset Hills near Bard Lake, south of Moorpark (2003 and 2016)	–

Table 5.4-2 Special Status Species Known to Occur in the Moorpark Vicinity

Species	Status			Occurrence Information (Year Recorded)	Critical Habitat
	Fed	CA	Other		
Rorippa [Nasturtium] gambellii Gambel's watercress	END	THR	CNPS 1B.1	No records occur within Ventura County, but Moorpark is within the USFWS "known or expected range" for this species	–
Salvia carduacea thistle sage	–	–	LIS	Reported in the Happy Camp Canyon Park, north of Moorpark (2016)	–
Senecio aphanactis California groundsel	–	–	CNPS 2B.2 LIS	Reported in Sunset Hills, south of Moorpark (1976); and Arroyo Conejo Open Space and Wildwood Regional Park, Thousand Oaks (2003 and 2009)	–
Suaeda taxifolia woolly seablite	-	-	CNPS 4.2	Returned by CNPS literature review of Simi and Moorpark quadrangles, but no records found within Plan Area	-
Verbena bracteata bracted verbena	–	–	LIS	Reported in the Tierra Rejada Valley, Moorpark (1996 and 2011); and the Big Mountain foothills, north of Moorpark (2003)	–

Source: ECORP 2022
Federal Designation (Federal Endangered Species Act, USFWS)
END: Federally listed, endangered
THR: Federally listed, threatened
State Designation (California Endangered Species Act, CDFW)
END: State listed Endangered
California Native Plant Society (CNPS)
1B: Plants rare, threatened, or endangered in California and elsewhere
2B: Plants rare, threatened, or endangered in California, but more elsewhere
3: Plants about which we need more information; a review list
4: Plants of limited distribution; a watch list
List Extensions
1: Seriously threatened in California (over 80 percent of occurrences threatened)
2: Moderately threatened in California (20 to 80 percent of occurrences threatened)
3: Not very threatened in California (less than 20 percent of occurrences threatened)
Ventura County, locally important species (LIS)
– Indicates information that is not applicable to the species.

- **Marsh sandwort** (*Arenaria paludicola*) is a state and federally listed endangered species and is CNPS-listed as 1B.1. This species is a perennial stoloniferous herb that flowers between May and August and is known to occur in sandy openings of marshes and swamps and areas that are wet year round. This species is found at elevations between 3 and 170 meters. This species' known current range is limited to one known extant, wild population at Oso Flaco Lake, and one extant, introduced population at Sweet Springs Marsh on the southern edge of Morro Bay.

- **Conejo dudleya** (*Dudleya parva*) is a federally listed threatened species and is CNPS-listed as 1B.2. Conejo dudleya is a perennial herb native to Conejo Valley and surrounding regions. This species is found at elevations between 90 and 38 meters and occurs on rocky slopes and grassy hillsides with clay or volcanic soils. It is associated with coastal scrub and valley and foothill grassland habitats. Conejo dudleya has been recorded in the southeastern portion of Moorpark.

- **Spreading navarretia** (*Navarretia fossalis*) is a federally listed threatened species and is CNPS listed as 1B.1. This species is an annual herb that flowers between April and June and is known to occur in chenopod scrub, marshes and swamps (assorted shallow freshwater), playas, and vernal pools. This species is found at elevations between 30 and 665 meters. During the most recent five-year review, this species' known range extended from northwestern Los Angeles County to western Riverside County, and coastal San Diego County in California, to San Quintin in northwestern Baja California, Mexico.

- **California Orcutt grass** (*Orcuttia californica*) is a state and federally listed endangered species and is CNPS listed as 1B.1. California Orcutt grass is an annual grass that is native to California. This species is associated with deep, ephemeral vernal pools underlain by clay soils and is found at elevations between 10 and 660 meters. California Orcutt grass has been recorded in the Terra Rejada Vernal Pool Preserve in the southeastern portion of Moorpark within the Carlsberg Specific Plan area.

- **Lyon's pentachaeta** (*Pentachaeta lyonii*) is a state and federally listed endangered species and is CNPS listed as 1B.1. Lyon's pentachaeta is an annual herb that is endemic to California. This species is associated with openings in chaparral, coastal scrub, and valley and foothill grassland habitats and is found at elevations between 30 and 670 meters. It typically occurs in compact soil and exposed, rocky clay soils. Lyon's pentachaeta has been recorded in scattered locations throughout Moorpark and was identified in the southeastern portion of the Carlsberg Specific Plan area.

  - **Critical Habitat.** The USFWS designated areas of critical habitat for Lyon's pentachaeta in 2006. Unit 1 (Simi Valley) of the designated critical habitat is in the northern portion of Moorpark on either side of SR-23, one within the Tierra Rejada Vernal Pool Preserve within the Carlsberg Specific Plan area (See Figure 5.4-2, *Critical Habitat*).

- **Gambel's watercress** (*Rorippa [Nasturtium] gambellii*) is a federally listed endangered species, state listed threatened species, and is CNPS listed as 1B.1. Gambel's watercress is a perennial rhizomatous herb that is associated with freshwater or brackish marshes and swamps. This species is found at elevations between 5 and 330 meters. During the most recent five-year review, this species' known distribution was limited to one remaining wild population discovered in 1996 on Vandenburg Air Force Base in Santa Barbara County, and one population that was introduced in October 2008 on the Refuge in San Luis Obispo County.

Special-Status Wildlife

Special-status wildlife species include those classified as endangered or threatened, proposed or candidate species for listing by the USFWS or CDFW, or considered a CDFW Fully Protected (FP) or Species of Special Concern (SSC). Animal species with potential habitat in the City of Moorpark and considered to be a County of Ventura locally important species are also included (see Appendix C, County of Ventura Locally Important Species List, of Appendix E).

The CNDDB search and review of locally important species identified 28 special-status wildlife species known to occur in the vicinity of Moorpark. Two species were identified by an informal review of the USFWS IPaC database (See Appendix B, CNDDB, CNPS, and IPaC Database Search Results, of Appendix E

of the DEIR), three additional species were documented during EIR studies, and Moorpark is within the proposed Evolutionary Significant Unit (ESU) of one state candidate species (mountain lion [*Felis concolor*]). One additional species, Crotch bumble bee (*Bombus crotchii*) was recently removed as a state candidate species, but is included for consideration as recent litigation will likely reinstate this species' candidacy and the Plan Area occurs within the known current range for this species. Table 5.4-3, *Special Status Wildlife Species Known to Occur in Moorpark*, summarizes the special-status wildlife, associated habitats, and designated critical habitat within the vicinity of Moorpark. Wildlife species listed or proposed for listing under FESA and/or CESA are discussed in more detail below.

Table 5.4-3 Special-Status Wildlife Species Known to Occur in Moorpark

Species	Status			Occurrence Information (Year Recorded)	Critical Habitat
	Fed	CA	Other		
Invertebrates					
Bombus crotchii[1] Crotch bumble bee	–	–	–	Two historic records occur within 9 miles of Moorpark (1939 and 1963)	–
Branchinecta lynchi vernal pool fairy shrimp	THR	–	–	Potentially present	Moorpark does not contain designated Critical Habitat for this species.
Danaus plexippus monarch	CAN	–	–	Potentially present	–
Haplotrema caelatum slotted lancetooth snail	–	–	LIS	Potentially present	–
Helminthoglypta phlyctaena zaca shoulderband snail	–	–	LIS	Potentially present	–
Helminthoglypta salviae sage shoulderband snail	–	–	LIS	Potentially present	–
Helminthoglypta venturensis Ventura shoulderband snail	–	–	LIS	Potentially present	–
Helminthoglypta willeti Matilija shoulderband snail	–	–	LIS	Potentially present	–
Streptocephalus woottoni Riverside fairy shrimp	END	–	–	Reported within the Tierra Rejada Vernal Pool Preserve, Moorpark (1998, 2001, and 2011)	Designated Critical Habitat for this species (Subunit 1a: Tierra Rejada Preserve) is located within the southeastern portion of Moorpark
Timema monikensis walking stick	–	–	LIS	Potentially present	–
Fish					
Cottus asper prickly sculpin	–	–	LIS	Potentially present	–
Catostomus santaanae Santa Ana sucker	THR	–	AFS(TH)	Reported in various locations along the Santa Clara River, Sespe Creek, Piru Creek, and Castaic Creek (1975, 1992, 1996-2000, 2003-2005, and 2007)	Moorpark does not contain designated Critical Habitat for this species.

Table 5.4-3 Special-Status Wildlife Species Known to Occur in Moorpark

Species	Status			Occurrence Information (Year Recorded)	Critical Habitat
	Fed	CA	Other		
Gasterosteus aculeatus williamsoni unarmored threespine stickleback	END	END FP	AFS(EN) LIS	Reported in various location along the Santa Clara River, from Santa Clarita to Saticoy (1994, 1995, 1997, 1998, 2000, and 2003-2007)	–
Gila orcuttii arroyo chub	–	SSC	AFS(VU) USFS	Transplanted populations (outside native habitat/range) reported at various locations along the Arroyo Simi, Moorpark (2000)	–
Amphibians					
Spea hammondii western spadefoot	–	SSC	–	Reported in the Big Mountain foothills, Moorpark (2003); Happy Camp Canyon Regional Park, north of Moorpark (2019); mine site northwest of Moorpark (2004); locations just north of Simi Valley (2000 and 2017); and Arroyo Simi, Simi Valley (2013)	–
Reptiles					
Actinemys marmorata western pond turtle	–	SSC	–	Reported at Arroyo Simi, Simi Valley (2010)	–
Anniella spp. California legless lizard	–	SSC	–	Reported along Arroyo Simi, Moorpark and Simi Valley (1982 and 1983); Happy Camp Canyon Park, north of Moorpark (1990 and 1993); and Las Posas Hills, Camarillo (2014)	–
Arizona elegans occidentalis California glossy snake	–	SSC	LIS	Reported in Happy Camp Canyon Park, north of Moorpark (1995)	–
Aspidoscelis tigris stejnegeri coastal whiptail	–	SSC	–	Multiple locations reported in Simi Valley (1996). Observed throughout the Carlsberg Specific Plan area (1992)	–
Phrynosoma blainvillii coast horned lizard	–	SSC	–	Reported in various unnamed canyons in Happy Camp Canyon Park, northwest of Moorpark (2002); east of Alamos Canyon Road, Simi Valley (2008); and in a dry streambed, southwest of Filmore (2003)	–
Thamnophis hammondii two-striped gartersnake	–	SSC	–	Reported in the Arroyo Simi, Simi Valley (1993)	–
Birds					
Athene cunicularia burrowing owl	–	SSC	BCC	Reported on Oak Ridge, northeast of Moorpark (2006); and in Simi Valley (1990)	–
Camphylorhynchus brunneicapillus couesi coastal cactus wren	_	SSC	BCC	Heard calling within Hitch Ranch Specific Plan Area (2005 and 2021)	-

Table 5.4-3 Special-Status Wildlife Species Known to Occur in Moorpark

Species	Status			Occurrence Information (Year Recorded)	Critical Habitat
	Fed	CA	Other		
Coccyzus americanus occidentalis western yellow-billed cuckoo	THR	END	BCC	Reported in the Santa Clara River, northeast of Santa Paula (2018)	Moorpark does not contain designated Critical Habitat for this species.
Elanus leucurus white-tailed kite	–	FP	–	Reported along the Arroyo Simi, just southwest of Moorpark (2011). Observed foraging within the West Point Homes Specific Plan area (1999). Reported foraging within the Hitch Ranch Specific Plan area (1998 and 2021)	–
Empidonax traillii extimus southwestern willow flycatcher	END	END	–	Reported along the Santa Clara River, east of Santa Paula (2009)	Moorpark does not contain designated Critical Habitat for this species.
Gymnogyps californianus California condor	END	END FP	–	Unlikely to nest but potentially present as foraging species	Moorpark does not contain designated Critical Habitat for this species.
Icteria virens yellow-breasted chat (nesting)	–	SSC	–	Observed just south of the West Point Homes Specific Plan area (1998) and a single chat within the Hitch Ranch Specific Plan Area (1998)	
Lanius ludovicianus loggerhead shrike (nesting)	–	SSC	BCC	Observed just south of the West Point Homes Specific Plan area (1998) observed in Hitch Ranch Specific Plan Area (1993, 1998 2007, and 2011)	
Polioptila californica coastal California gnatcatcher	THR	SSC	–	Reported in various locations in Moorpark (1995, 1997, 1998, 2008, 2012, and 2015); west of Simi Valley (2010-2012); and north of Simi Valley (2015); detected during protocol surveys for Hitch Ranch Specific Plan Area (1998, 2000, 2003, 2005, 2009, 2011, 2016, and 2021)	Designated Critical Habitat for this species (Unit 13) is located within the eastern portion of Moorpark.
Riparia bank swallow	–	THR	–	Historically reported along the Santa Clara River, southwest of Fillmore (1904, 1910, and 1926); and along the Arroyo Simi, Simi Valley (1897); currently presumed to be extirpated as a breeder in Southern California	–
Vireo bellii pusillus least Bell's vireo	END	END	–	Reported at multiple locations along the Santa Clara River, near Santa Paula (1925, 1990-1993, 2009-2011, and 2015); Arroyo Los Posas Creek, west of Moorpark (2007 and 2009); multiple locations along the Arroyo Simi, in Moorpark and Simi Valley (1983, 1985, 2008, 2015, and 2017)	Moorpark does not contain designated Critical Habitat for this species.

Table 5.4-3 Special-Status Wildlife Species Known to Occur in Moorpark

Species	Status			Occurrence Information (Year Recorded)	Critical Habitat
	Fed	CA	Other		
Mammals					
Felis concolor[2] mountain lion	–	CAN THR	–	Potentially present. Not currently tracked by CNDDB but informal (media) sightings exist	–
Neotoma lepida intermedia San Diego desert woodrat	–	SSC	–	Reported in Moorpark and Simi Valley (1992)	–
Taxidea taxus American badger	–	SSC	–	Reported in Moorpark (2016)	–

Source: ECORP 2022
[1] State candidacy revoked in January 2022, but candidacy status may be reinstated based on June 2022 court decision.
[2] *Currently listed as State Candidate on State and Federally Listed Endangered and Threatened Animals of California but not the Special Animals List.
Federal Designation: Federal Endangered Species Act, USFWS)
END: Federally listed, endangered
THR: Federally listed, threatened
State Designation: (California Endangered Species Act, CDFW)
END: State listed Endangered
THR: State listed Threatened
CAN: Candidate for listing
FP: Fully Protected
SSC: Species of Special Concern
American Fisheries Service (AFS)
EN: Endangered
TH: Threatened
VU: Vulnerable
Ventura County, locally important species (LIS)
USFWS Birds of Conservation Concern (BCC)
– Indicates information that is not applicable to the species.

- **Crotch bumble bee** (*Bombus crotchii*) was petitioned for listing in 2018, advanced to state candidacy status in June 2019, challenged and ruled ineligible for listing under CESA (categorized as a fish) in November 2020, and then ruled (by the Third Appellate Court District in California) that "…a terrestrial invertebrate… may be listed as an endangered or threatened species under the [California Endangered Species Act]" under the definition of "fish." At the time of this report and pending ongoing litigation, this species does not have legal status under CESA and is not considered a State Candidate. This species is known to inhabit open grassland and scrub habitats. It occurs primarily in California, including the Mediterranean region, Pacific Coast, Western Desert, Great Valley, and adjacent foothills through most of southwestern California. Because this species is easily overlooked, most of the CNDDB records are based on museum specimens, none of which are from the Moorpark or Simi quadrangle search, but Moorpark is within the current range for this species.

- **Vernal pool shrimp** (*Branchinecta lynchi*) is a federally listed threatened species. Vernal pool fairy shrimp occur in cool-water vernal pools or vernal-pool-like habitats. Only one CNDDB record is known, approximately 37 miles north of Moorpark in northern Ventura County.

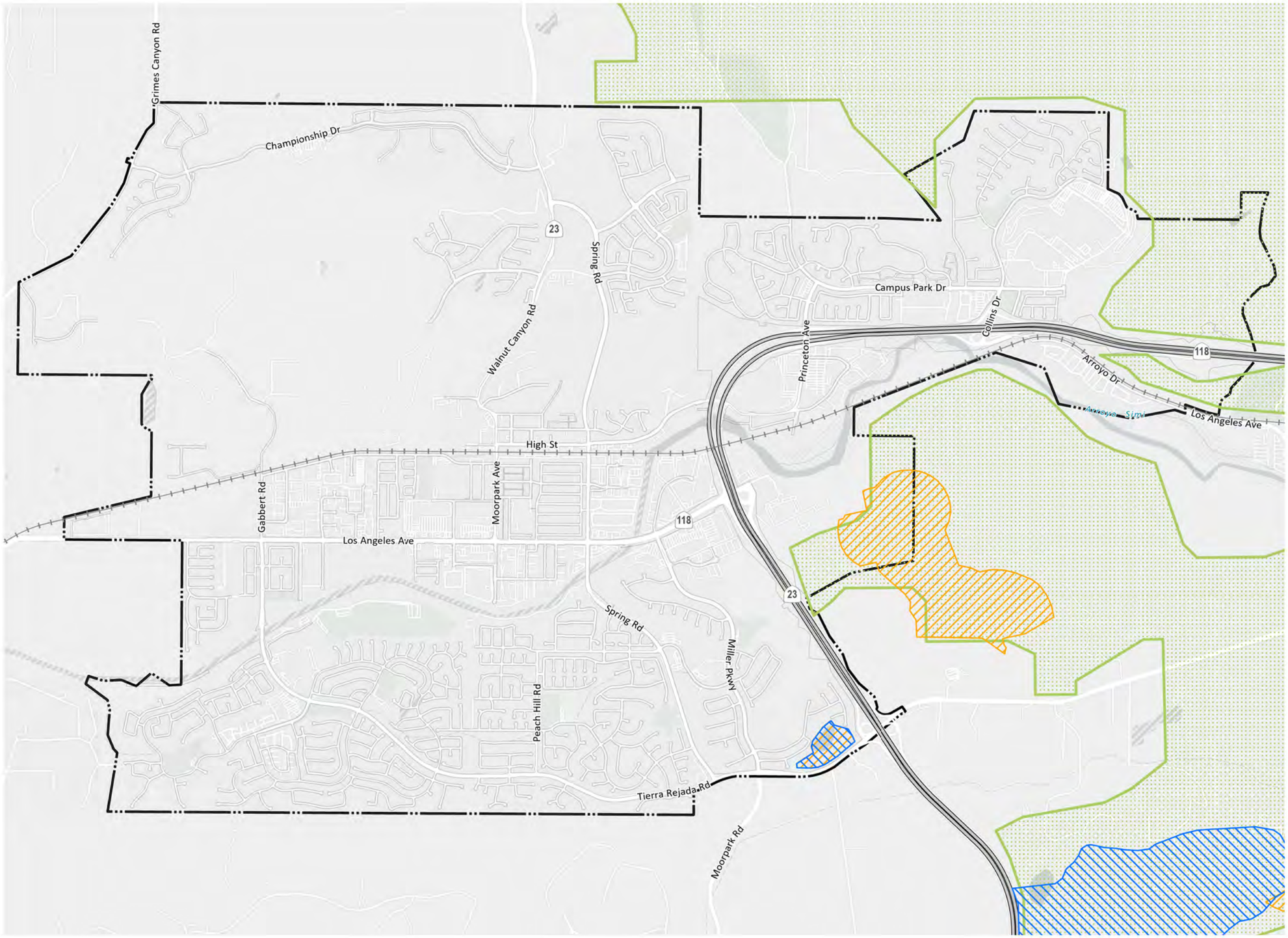
- **Monarch butterfly** (*Danaus plexippus pop. 1*) is a candidate for federal listing (California overwintering population only) whose listing is warranted, but precluded at this time by more critical species. A decision

on the listing status is delayed until 2024. This species is dependent on its larval host plant (milkweed [*Asclepias* spp.]) for breeding habitat and nectars on a variety of flowering plants and annuals. Most of the monarch overwintering sites in California are located within approximately 1.5 miles of the coast and provide very specific microclimate conditions that include dappled sunlight, fresh water, high humidity, and absence of freezing temperatures. The CNDDB does not track this species, but it likely migrates through the area on its way to and from coastal overwintering grounds.

- **Riverside fairy shrimp** (*Streptocephalus woottoni*) is a federally listed endangered species. Riverside fairy shrimp are associated with coastal scrub and grassland habitats and are found in moderately deep vernal pools or ephemeral ponds. Riverside fairy shrimp have been recorded in the Terra Rejada Vernal Pool Preserve in the southeastern portion of Moorpark.
  - **Critical Habitat**. The USFWS designated critical habitat for Riverside fairy shrimp in 2001 and revised the designation in 2012. Subunit 1a (Tierra Rejada Preserve) of designated critical habitat is in the southeastern portion of Moorpark (see Figure 5.4-2).
- **Santa Ana sucker** (*Catostomus santaanae*) is a federally listed threatened species. Santa Ana sucker is endemic to California and is found in cool, clear streams with sand, rubble, and boulder bottoms and algae. Santa Ana sucker has been recorded in several locations north of Moorpark; however, this species has not been documented within the city.
- **Unarmored three-spine stickleback** (*Gasterosteus aculeatus williamsoni*) is a state- and federally listed endangered species and a CDFW fully protected species. Unarmored three-spine stickleback prefer cool, clear water and are associated with weedy pools, backwaters, and southern California streams with emergent vegetation. Unarmored three-spine stickleback has been recorded to the north of Moorpark; however, this species has not been documented within the city.
- **Western yellow-billed cuckoo** (*Coccyzus americanus occidentalis*) is a federally listed threatened and state-listed endangered species. Western yellow-billed cuckoo is associated with riparian woodlands and forests, along the broad, lower flood bottoms of larger river systems and nests in riparian areas with willows, cottonwoods, and a dense understory. Western yellow-billed cuckoo has been recorded to the northwest of Moorpark; this species has not been documented within the city.
- **Southwestern willow flycatcher** (*Empidonax traillii extimus*) is a state and federally listed endangered species that breeds in dense riparian vegetation along rivers and streams in the southwestern United States from May through September. This species is associated with riparian woodland and forests. They construct nests in dense thickets of willows, mulefat, and other trees and shrubs approximately four to seven meters in height. They virtually always nest near surface water or saturated soil. Southwestern willow flycatcher has been recorded to the northwest of Moorpark; however, this species has not been documented within the city.

Figure 5.4-2

Critical Habitat



City Boundary

Railroad

Critical Habitats

RIVERSIDE FAIRY SHRIMP

LYON'S PENTACHAETA

COASTAL CALIFORNIA GNATCATCHER

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- **California condor** (*Gymnogyps californianus*) is a state and federally listed endangered species and a CDFW fully protected species. This species requires large areas of remote country for foraging, roosting, and nesting and are known to fly 150 miles a day in search of food. Condors roost on large trees or snags, or on isolated rocky outcrops and cliffs. Foraging habitat includes open grasslands and oak savanna foothills that support populations of large mammals such as deer and cattle. This species was removed completely from the wild by 1987 and captive-bred condors have been gradually reintroduced to the wild beginning in 1992. The Sespe Condor Sanctuary is in northern Ventura County, and this species is known to nest at Hopper Mountain National Wildlife Refuge approximately 10 miles north of Moorpark.

- **Coastal California gnatcatcher** (*Polioptila californica californica*) is a federally listed threatened species and a CDFW SSC. Coastal California gnatcatcher is an obligate permanent resident of sage scrub habitat below 765 meters in southern California. This species is found in low, sage scrub in arid washes, on mesas, and on slopes. Coastal California gnatcatcher has been documented in several locations throughout the city.

  - **Critical Habitat.** The USFWS designated critical habitat for coastal California gnatcatcher in 2000 and revised the designated critical habitat in 2007. Unit 13 of designated critical habitat is located within the eastern portion of the city (See Figure 5.4-2).

- **Bank swallow** (*Riparia riparia*) is a state-listed threatened species. Bank swallow is a colonial nester and is associated with riparian and lowland habitats west of the desert. It requires vertical banks or cliffs with fine-textured, sandy soils near streams, rivers, lakes, or ocean for nesting. Bank swallow has been documented east and northwest of Moorpark; however, this species has not been documented within the city.

- **Least Bell's vireo** (*Vireo bellii pusillus*) is a state- and federally listed endangered species. This species inhabits riparian woodland habitats consisting of cottonwoods, willows, and mulefat. Least Bell's vireos are found in areas with a dense shrub cover and a dense, stratified canopy. Nests occur in dense thickets of willow or mulefat one or two meters from the ground. Least Bell's vireo has been documented in the southeastern portion of Moorpark and in several locations immediately east of the city.

- **Mountain lion** (*Puma concolor*) is a candidate for state listing. The petition to list is specific to the ESU of mountain lions in southern and central coastal California. Mountain lions require large areas of relatively undisturbed habitats with adequate connectivity to allow for dispersal and gene flow. They have large home ranges that include heterogenous habitats. In the United States, these often consist of pine forests, riparian and oak woodlands, streams, chaparral, and grasslands, though they are also known to occur in desert habitats. Because this species has only recently been proposed for listing and is not a species typically reported to the CNDDB, no CNDDB records occur within Moorpark; however, media articles for sightings exist.

Nesting Bird Species

Moorpark supports a variety of habitats that provide suitable nesting habitat for native migratory and resident bird species, including owls and raptors. Ground nesting species are likely to nest in the grassland habitat and

more open natural areas. Native trees and shrubs provide nesting habitat for numerous songbird species. Both native and landscaped trees can be utilized for nesting by migratory birds, and many species have adapted to urban environments. Bridges, buildings, and other artificial structures commonly support nesting passerines and raptors. Virtually all native nesting songbirds and raptors are protected by the MBTA.

Roosting Bats

Moorpark supports a variety of habitats that provide suitable roosting habitat for native bat species. Bats can roost in a variety of habitats including cliffs, rock crevices, natural and landscaped trees (i.e. tree hollows, leaf foliage), forests, thickets, bridges, buildings, and other artificial structures.

Habitat Conservation Plans and Natural Community Conservation Plans

No CDFW-permitted Natural Community Conservation Plan (NCCP) or Habitat Conservation Plan (HCP) occurs within the City of Moorpark or County of Ventura (see Figure 5.4-3, *NCCP and HCP Plan Areas*).

Moorpark Highlands Specific Plan HCP

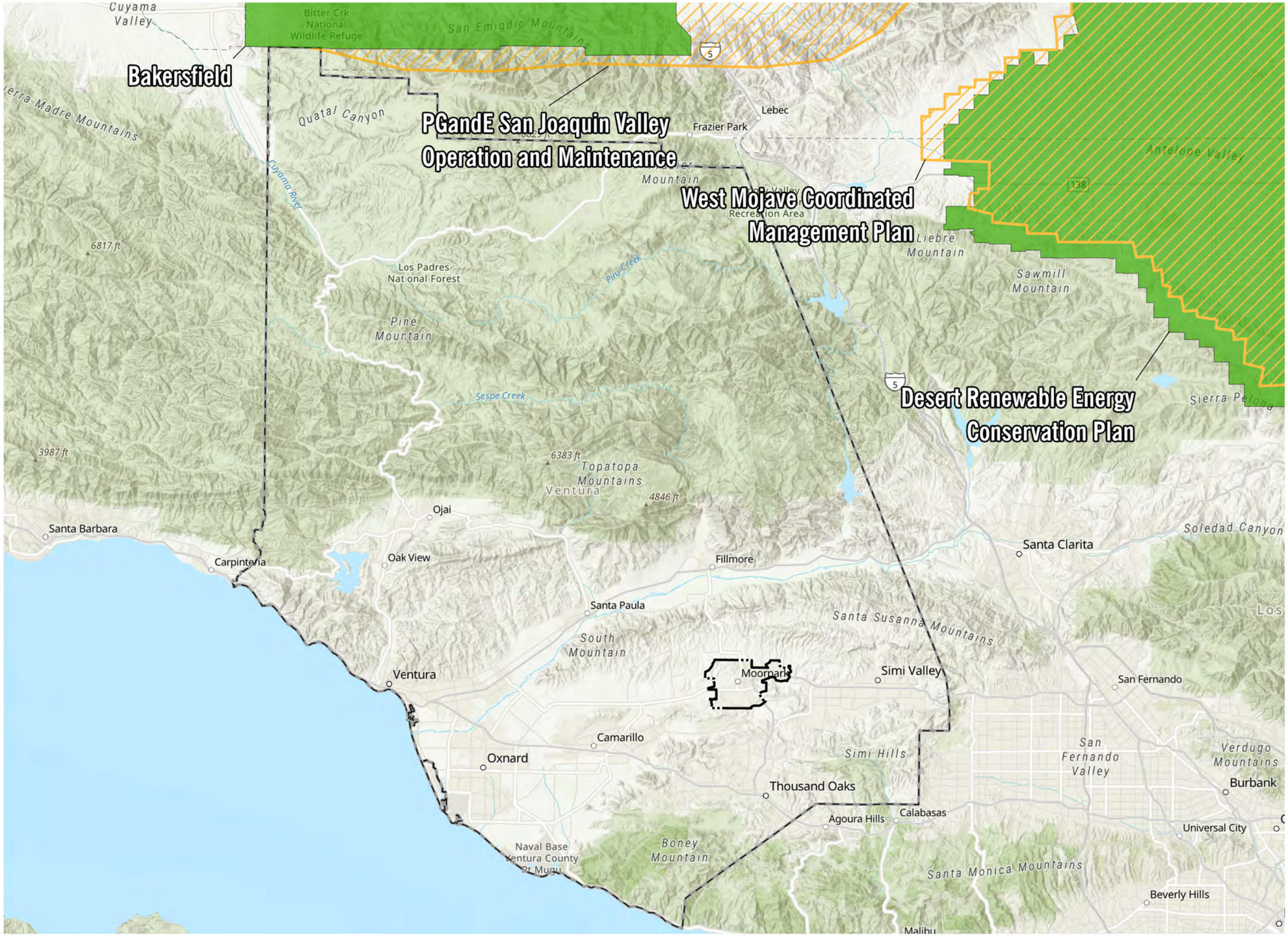
As identified in Section 2.4, Municipal Code 17, the approved Moorpark Highlands Specific Plan II permanently preserved 169 acres of land in an HCP, providing open space that enhances the habitat within 94 of those acres, and provides multiuse trails for access to these areas by the public. These areas shall remain ungraded and shall not be developed, with the exception of roadway and infrastructure improvements necessary for the construction of Spring Road. The natural open space zone areas impacted by grading for Spring Road shall be recontoured and revegetated to the standards in the design guidelines, Section 8 of Specific Plan II. Subsequent revegetation and/or maintenance activities within the natural open space areas shall be limited to activities as prescribed in the HCP.

Wildlife Movement Corridors and Linkages

Wildlife corridors are linear landscape elements that provide for wildlife species movement and dispersal between two or more habitats. Wildlife corridors contribute to population viability by ensuring continual exchange of genes between populations, providing access to adjacent habitat areas for foraging and mating, and providing routes for recolonization of habitat after local displacement or ecological catastrophes (e.g., fires). Wildlife corridors could be bounded by development or areas unsuitable for wildlife, but could contain enough food, cover, and/or water to facilitate wildlife movement between habitat patches and prevent isolation of populations. Travel routes are landscape features (i.e., ridgelines, drainages, canyons, or riparian areas) that are used by wildlife to gain access to essential resources. Areas adjoining two habitats are also often referred to as habitat linkages.

Figure 5.4-3

NCCP and HCP Plan Areas



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Santa Monica–Sierra Madre Connection

A statewide interagency workshop was conducted in 2000 to delineate habitat linkages critical for preserving the state's biodiversity. The Santa Monica–Sierra Madre Connection is a chain of linkages that connect the Santa Monica, Simi, Santa Susana, and Sierra Madre ranges, addressing 2 of the 15 landscape linkages identified as irreplaceable and imminently threatened (see Figure 5.4-4, *Regional Wildlife Corridor*). The Santa Monica-Sierra Madre Connection linkage serves to connect the Los Padres and Angeles national forests. It covers very diverse ecological settings and encompasses several major vegetation types. It is one of the few remaining coastal-to-inland connections in the South Coast Ecoregion. The final Linkage Design covers approximately 398,944 acres, of which 75 percent is already protected. It has several main strands, reflecting variation in habitat needs of different sets of target species.

The northern strand is dominated by pinyon-juniper woodland, sagebrush, and desert scrub habitats and serves linkage needs of American badger (*Taxidea taxus*), mountain lion, and mule deer (*Odocoileus hemionus*). The central strands connect at generally higher elevations, including a series of hardwood, conifer, chaparral, and riparian habitats. They serve the needs of numerous focal species, including mountain lion, mule deer, Pacific kangaroo rat (*Dipodomys agilis*), California spotted owl (*Strix occidentalis*), acorn woodpecker (*Melanerpes formicivorus*), mountain kingsnake (*Lampropeltis zonata*), pond turtle (*Actinemys marmorata*), two-striped garter snake (*Thamnophis hammondii*), Monterey salamander (*Ensatina eschscholtzii*), and bear sphinx moth (*Proserpinus lucidus*). The southernmost strand of the Linkage Design follows the southern foothills and is dominated by coastal oak woodland, coastal sage scrub, valley foothill riparian, and grassland habitats. It provides the only fairly contiguous belt of coastal habitats in the Linkage Design and provides connectivity for mule deer, Pacific kangaroo rat, acorn woodpecker, Monterey salamander, and many other species.

The Santa Monica–Sierra Madre Connection occurs within the eastern half of the city and branches around Moorpark College and residential developments that largely restrict wildlife movement through this area. The current general plan has designated the majority of the eastern portion of the linkage (north and south of SR-118) and the majority of the southern portion of the linkage (east of SR-23) as Open Space. The western branch is fragmented by existing industrial and residential developments and includes the Moorpark Highlands Specific Plan area. The area connecting the western branch through the Specific Plan area could be further fragmented by the extension of SR-23 and North Hills Parkway, a potential bypass route for SR-118.

Tierra Rejada Critical Wildlife Passage Area

Critical Wildlife Passage Areas (CWPA) are within the boundaries of the larger wildlife movement corridors and linkages. CWPAs are areas identified as being particularly critical for facilitating wildlife movement based on one or more of the following factors: (1) the existence of intact native habitat or other habitat with important beneficial values for wildlife; (2) proximity to water bodies or ridgelines; (3) proximity of critical roadway crossings used by wildlife; (4) likelihood of encroachment by future development, and within which wildlife movement and plant dispersal could be easily disturbed by development; or (5) presence of nonurbanized or undeveloped lands within a geographic location that connects core habitats at a regional scale. Although not within Moorpark, the Tierra Rejada Valley CWPA occurs immediately adjacent to the Moorpark's southeast border (see Figure 5.4-4). The Tierra Rejada Valley has been identified as a critical link

that facilitates animal movement between the Santa Monica Mountains and the Santa Susana Mountains to the north.

Jurisdictional Aquatic Resources

Aquatic resources that meet the definition of waters of the United States fall under the jurisdiction of the USACE and are subject to regulation under Section 404 of the CWA. Waters of the United States are also subject to regulation by the RWQCB under Section 401 of the CWA. Some aquatic resources that are excluded from the definition of waters of the United States and not regulated under the CWA, such as isolated wetlands and man-made water features, may still be regulated at the state level by the RWQCB and/or the CDFW.

Discharge of waste to waters of the State, defined as "any surface water or groundwater, including saline waters, within the boundaries of the state," is regulated by the RWQCB under the Porter-Cologne Water Quality Control Act.

Aquatic resources under the jurisdiction of the CDFW include the definable bed, bank, or channel; areas of rivers, streams, and lakes that support periodic or intermittent flows, perennial flows, or subsurface flows; areas that support fish or other aquatic life; and areas that support riparian or hydrophytic vegetation in association with a streambed. This includes areas where waters flow as well as surrounding vegetation that is riparian in nature or tied hydrologically to the associated aquatic feature.

Aquatic features that are potentially under the jurisdiction of the USACE and the CDFW were identified within Moorpark using information obtained from the USFWS National Wetland Inventory (NWI) database and US Geological Survey's National Hydrography Dataset (NHD) (see Figure 5.4-5, *Potential Aquatic Features: NWI*, and Figure 5.4-6, *Potential Aquatic Features: NHD*, respectively).

5.4.2 Thresholds of Significance

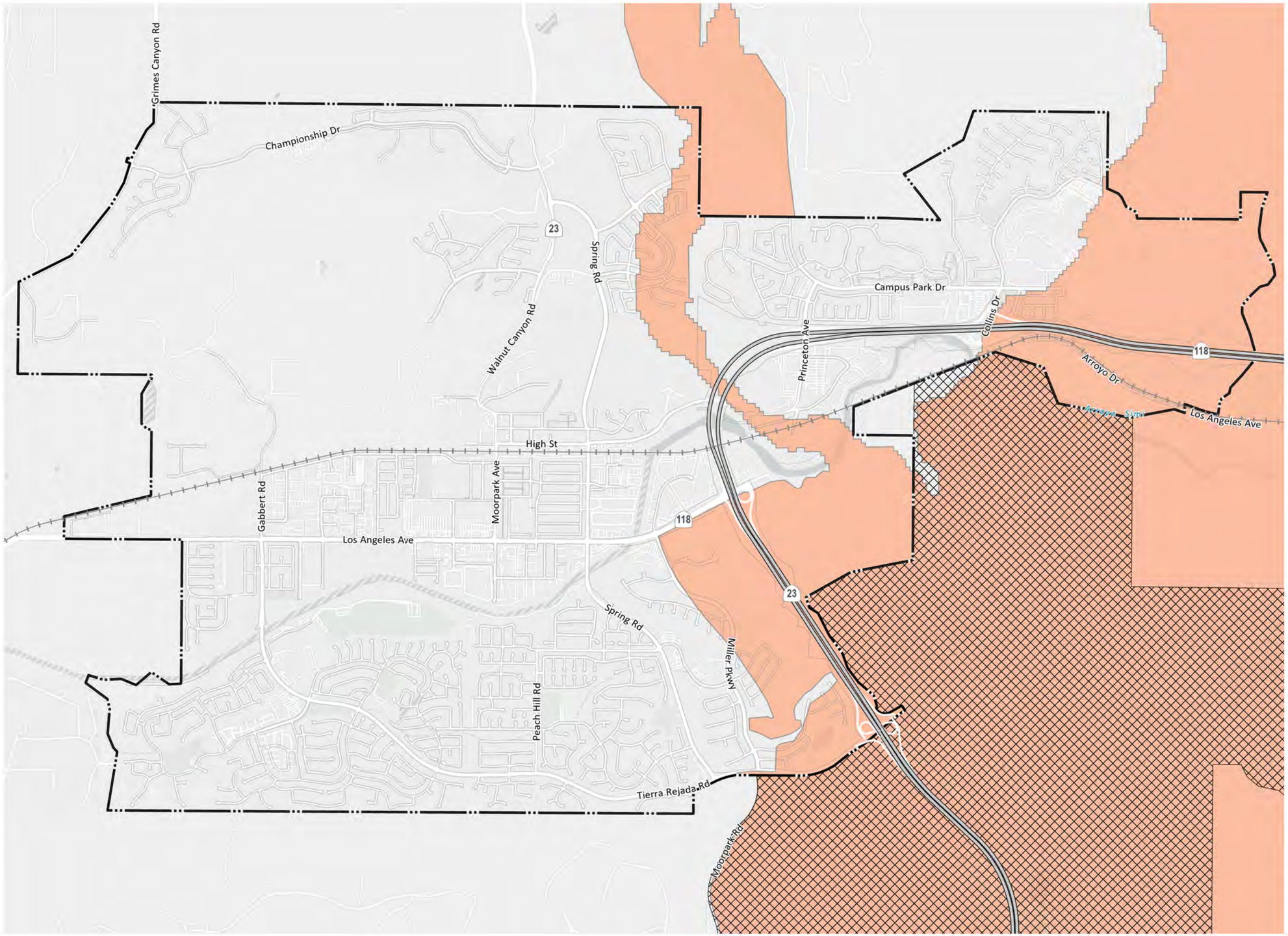
According to Appendix G of the CEQA Guidelines, a project would normally have a significant effect on the environment if the project would:

B-1 Have a substantial 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 Game or U.S. Fish and Wildlife Service.

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

B-3 Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means.

Figure 5.4-4
Regional Wildlife Corridor



City Boundary
Railroad

Critical Wildlife Passage Areas (CWPA)
Tierra Rejada

Regional Wildlife Corridor
Santa Monica - Sierra Madre Connection

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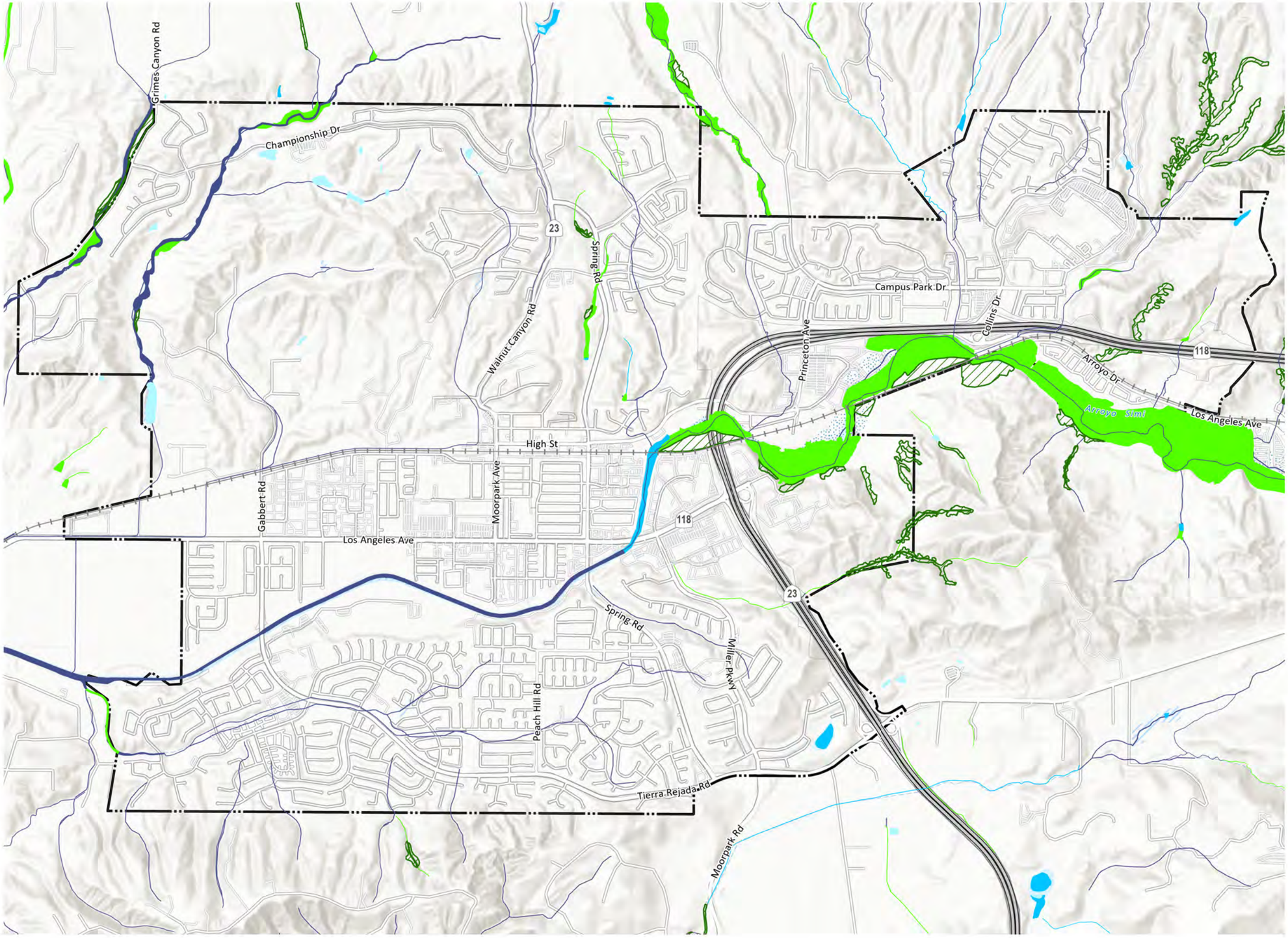
Figure 5.4-5

Potential Aquatic Features (NWI)



City Boundary

NWI Riparian

Forested/Shrub Riparian

NWI Type

Freshwater Emergent Wetland

Freshwater Forested/Shrub Wetland

Freshwater Pond

Riverine

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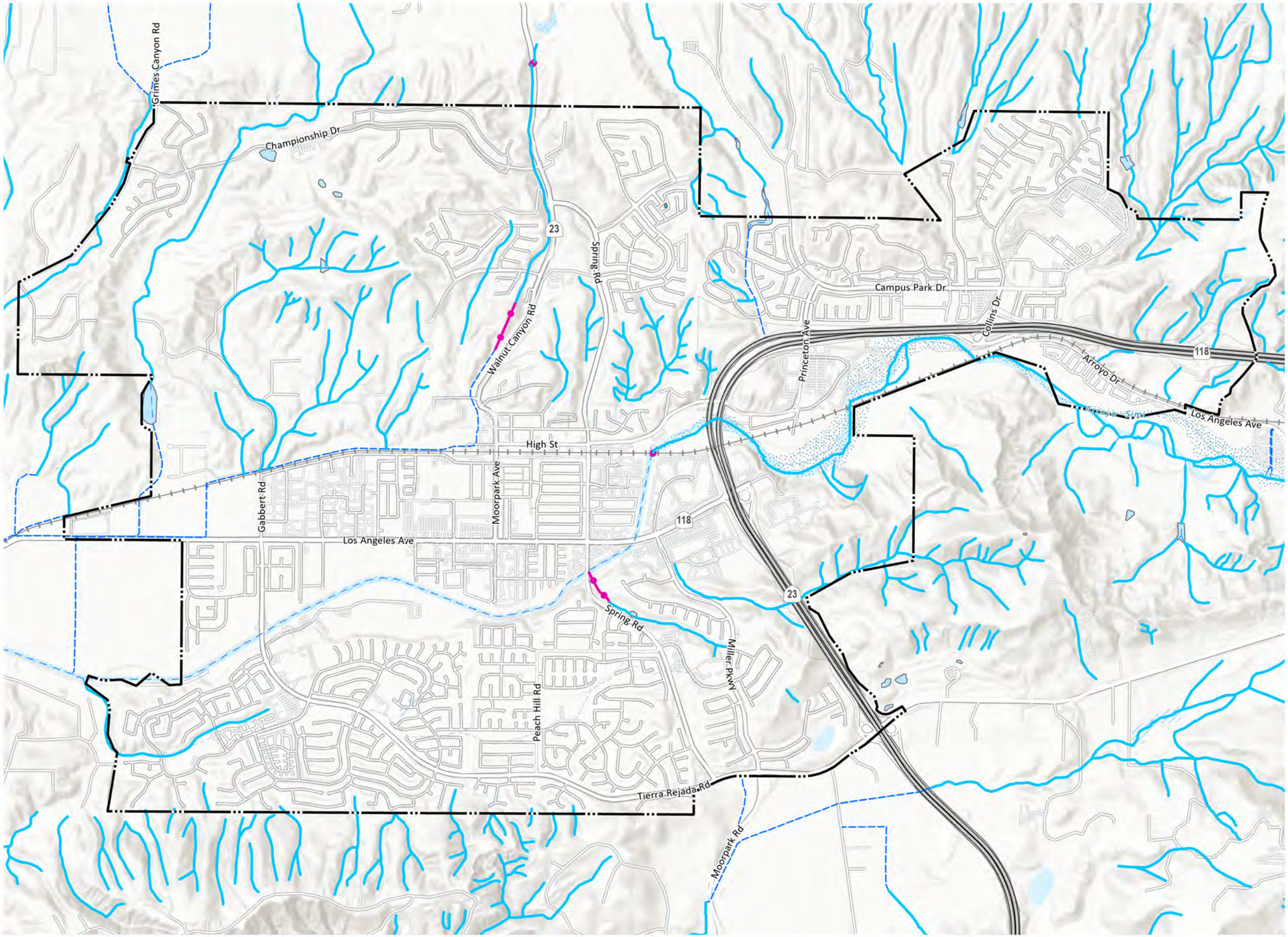
Figure 5.4-6

Potential Aquatic Features (NHD)



City Boundary

NHD Type

- ArtificialPath
- CanalDitch
- Connector
- StreamRiver
- LakePond
- Reservoir

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B-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.

B-5 Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.

B-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.

5.4.3 Environmental Impacts

5.4.3.1 METHODOLOGY

Information regarding biological resources in Moorpark was obtained from a search of sensitive species databases; a review of pertinent literature, prior environmental documents, and aerial photographs (see Appendix E); and review of the following databases:

- CDFW California Natural Diversity Database (CNDDB)
- Calflora Plant Database
- California Native Plant Society's (CNPS') Electronic Inventory
- USFWS Information Planning and Consultation (IPaC) System
- USFWS National Wetland Inventory (NWI)
- United States Department of Agriculture (USDA), Natural Resources Conservation Web Soil Survey
- USGS National Hydrography Dataset (NHD)

5.4.3.2 IMPACT ANALYSIS

The following impact analysis addresses thresholds of significance for which the Notice of Preparation disclosed potentially significant impacts. The applicable thresholds are identified in brackets after the impact statement.

Impact 5.4-1: Buildout of the Moorpark General Plan 2050 could impact species plant and animal species known to occur in the city. [Threshold B-1]

Several large areas of open space surround the city and support a variety of plants and animals native to California. These include but are not limited to the Monte Vista Nature Park, Miller Park, Peak Hill Park, Mountain Meadows City Park, Arroyo Vista Community Park, Tierra Rejada Park, and Mammoth Highlands Park. In addition, there is native habitat and riparian corridors within the city that could support sensitive species (see Figure 5.4-1). A large proportion of the city is urbanized and provides minimal habitat value for sensitive and special status species. However, undeveloped land includes natural vegetation. Less-developed areas of the city that are currently open space, water features, or under agricultural use have the potential to support native species and natural communities. Urbanized areas typically do not have the potential to support sensitive biological resources. In addition, Figure 5.4-2 identifies critical habitat for three species

within or adjacent to Moorpark—coastal California gnatcatcher, Lyon's pentachaeta, and Riverside fairy shrimp. According to the CDFW District 5 (South Coast Region), populations of coastal California gnatcatchers in the Ventura County area have been found to be genetically isolated from other populations within their range.

Future development in accordance with the proposed land use plan may replace existing vacant or undeveloped lands in the city with developed land uses or redevelop existing uses. Potential land covers that could contain habitat for sensitive biological species are open space areas, vacant urban land, and agricultural land, which total 2,930 acres in the city. The Moorpark General Plan 2050 allows for development on vacant urban land and agricultural land, which could potentially include sensitive biological resources in the city. In addition, the proposed project could result in loss of sensitive habitat due to fuel modifications and indirectly through the introduction of nonnative, invasive plants. Development adjacent to open space areas has the potential to increase the magnitude of edge effects on biological resources. Additionally, five sensitive natural communities (California walnut woodland, southern coast live oak riparian forest, southern riparian scrub, southern willow scrub, and valley oak woodland) were identified by the CNDDB based on the outdated Holland natural communities and five sensitive vegetation communities (California brittlebush scrub alliance, California sycamore woodland alliance, coastal prickly pear succulent scrub alliance, lemonade berry scrub alliance, and scale broom scrub alliance) utilizing the currently accepted NVCS systems were mapped within the city. All eight are associated with valuable habitat for wildlife, and in some cases may contribute to wildlife movement. Therefore, implementation of the Moorpark General Plan 2050 could impact areas of previously undisturbed habitat.

Buildout of the city in accordance with the Moorpark General Plan 2050 could impact sensitive natural communities (see Table 5.4-1), sensitive plants (see Table 5.4-2), and sensitive animal species (see Table 5.4-3) in the city. Based on the CNDDB search of historical data, 36 special status plant species and 35 special status wildlife species[1] are known to occur within the city or immediate vicinity. The city's environment is not static and may change over time as a result of development, fire, climate change, and other environmental factors. Therefore, other vegetation communities may become sensitive and/or species may be listed in the future.

Local, state, and federal agencies regulate sensitive biological resources and require an assessment of their presence or potential presence in the project vicinity prior to the approval and construction of a proposed development project. These assessments would be conducted for all sensitive vegetation communities and special status species that have the potential to occur within or immediately adjacent to a proposed development project site under the Moorpark General Plan 2050.

The proposed Conservation Element identifies policies to reduce impacts to Moorpark's diverse biological resources, including the following:

- **Policy COS-1.16 Ecologically Significant Resource Areas.** Maintain, restore, and enhance ecologically significant resource areas in their natural state to the greatest extent possible. Limit development in these

[1] Number includes Crotch bumble bee which is pending litigation and not currently a state candidate.

areas to compatible low-intensity uses with adequate provisions to protect sensitive resources, including setbacks around resource areas.

- **Policy COS-1.17 Native habitat protection.** Require that native vegetation and habitat are retained where feasible to support the health of local wildlife populations.

The following policy requires proposed development projects to conduct biological assessments to determine if sensitive biological resources and wildlife corridors would be impacted and to adopt a process and mitigation regulations for potential resource impacts, as required by USFWS and CDFW.

- **Policy COS-1.19: Biological resources evaluation.** Requires a biological resources evaluation prepared according to current state and federal protocols for projects with the potential to impact rare, threatened, endangered, or special-status species or critical habitat. If the evaluation determines that the project would impact rare, threatened, endangered, or special-status species or critical habitat, require that project proponents consult with the appropriate federal, state, and regional agencies and mitigate project impacts in accordance with state and federal law.

In addition, there is an HCP for Moorpark Highlands Specific Plan II that permanently preserved 169 acres. While adherence to the HCP and the City's policies protecting biological resources would assist in reducing impacts, under the CESA and FESA, future development projects would require more detailed evaluations of biological resources and formulation of mitigation measures, if needed, by a qualified biologist. Consequently, impacts to sensitive plant and animal species are considered potentially significant.

Level of Significance Before Mitigation: Potentially significant.

Impact 5.4-2: Implementation of the proposed Moorpark General Plan 2050 could impact sensitive natural communities, including wetlands and riparian habitat. [Threshold B-2 (part)]

There are several aquatic features that are potentially under the jurisdiction of the USACE and the CDFW in Moorpark (see Figure 5.4-5 and Figure 5.4-6) and may include definable bed, bank, or channel; areas of rivers, streams, and lakes that support periodic or intermittent flows, perennial flows, or subsurface flows; areas that support fish or other aquatic life; and areas that support riparian or hydrophytic vegetation in association with a streambed. This includes areas where waters flow, as well as surrounding vegetation that is riparian in nature or tied hydrologically to the associated aquatic feature. Specifically, these water resources may support biological resources, including riparian vegetation and associated wildlife species. Listed Riverside fairy shrimp and Lyon's pentachaeta have been recorded in the Terra Rejada Vernal Pool Preserve where a freshwater emergent wetland is mapped by the NWI in the southeastern portion of Moorpark. A CNDDB query identified 10 special status natural communities that occur within Moorpark (see Table 5.4-1). These habitats include California brittlebush scrub alliance, California sycamore woodland alliance, California walnut woodland, Coastal prickly pear scrub alliance, Lemonade berry scrub alliance, scale broom scrub alliance, southern coast live oak riparian forest, southern riparian scrub, southern willow scrub, and valley oak

woodland. Many of these sensitive communities documented in Moorpark are associated with ephemeral or perennial water features such as streams and washes.[2]

As described in the analysis for Impact 5.4-1, the policies under the Conservation Element would help conserve, protect, and manage Moorpark's biological resources, including natural and open space areas, habitats, hillsides, and wildlife. In addition, Policy COS-1.12 would encourage preservation of riparian habitat.

- **Policy COS-1.12: Riparian preservation.** Require that new development preserve natural watercourses and riparian habitat where they occur, either by avoidance or through ecologically-sensitive design, like clustering buildings, restoring riparian habitat, and purchasing development rights or easements.

However, implementation of the Moorpark General Plan 2050 policies would not completely avoid impacts on wetlands and riparian resources. Future site-specific projects built in accordance with the Moorpark General Plan 2050 could potentially impact these sensitive riparian habitats and may be required to create or restore on-site or off-site habitat as a condition of allowing impacts to sensitive species. To determine site-specific impacts and necessary mitigation, future projects would require more detailed evaluations of biological resources. Therefore, impacts are potentially significant.

Level of Significance Before Mitigation: Potentially significant.

Impact 5.4-3: Buildout of the Moorpark General Plan 2050 could impact undetermined amounts of wetlands and jurisdictional waters regulated by the US Army Corps of Engineers, California Department of Fish and Wildlife, and Los Angeles Regional Water Quality Control Board. [Threshold B-2 (part) and Threshold B-3]

Development in accordance with the Moorpark General Plan 2050 could impact waters and wetlands jurisdictional to the CDFW, USACE, and Los Angeles RWQCB. Waters of the United States are jurisdictional to the USACE; waters of the State are jurisdictional to the Los Angeles RWQCB and the CDFW; and wetlands meeting certain criteria are jurisdictional to the USACE and/or the CDFW.

Figures 5.4-5 and 5.4-6 identify that the City of Moorpark has a number of potential wetlands and riparian habitats that may be regulated by the USACE, CDFW, and/or Los Angeles RWQCB pursuant to several federal and state regulations. These include freshwater emergent wetlands, lakes/ponds, creeks, washes, aquifers, and other blue line streams. The proposed Conservation Element includes policies that minimize potential impacts to jurisdictional waters and wetlands for future development within Moorpark.

- **Policy COS-1.16 Ecologically Significant Resource Areas.** Maintain, restore, and enhance ecologically significant resource areas in their natural state to the greatest extent possible. Limit development in these areas to compatible low-intensity uses with adequate provisions to protect sensitive resources, including setbacks around resource areas.

[2] These include California sycamore woodland alliance, scale broom scrub alliance, southern coast live oak riparian forest, southern riparian scrub, and southern willow scrub.

- **Policy COS-1.17 Native habitat protection.** Require that native vegetation and habitat are retained where feasible to support the health of local wildlife populations.

Future development in accordance with the proposed Moorpark General Plan 2050 could impact jurisdictional waters and/or wetlands directly (e.g., building over the jurisdictional resources by filling the land) or indirectly (e.g., increased stormwater drainage or runoff into nearby jurisdictional waters). Thus, a more site-specific biological assessment would be required to protect waters on-site. A jurisdictional delineation may also be required by CDFW if there is potential riparian habitat on-site. If the assessment identified jurisdictional resources on-site, mitigation measures for impacts to jurisdictional waters, wetlands, and/or riparian habitat would be required. Federal and state permits would be necessary for any impacts to jurisdictional waters. Thus, impacts are considered potentially significant.

Level of Significance Before Mitigation: Potentially significant.

Impact 5.4-4: Development pursuant to the Moorpark General Plan 2050 could adversely impact wildlife movement in the Santa Monica–Sierra Madre Connection Corridor. [Threshold B-4 (part)]

Moorpark supports some continuous natural habitat blocks on the eastern side of the city. These areas support native biodiversity and are essential for ecological connectivity. The primary wildlife movement and migratory corridors are features that link large areas of open space. There are large areas of open space around the city. Although not within Moorpark, the Tierra Rejada Valley CWPA occurs immediately adjacent to Moorpark's southeast border (see Figure 5.4-4). Development in accordance with the Moorpark General Plan 2050 could impact the ecological integrity and function of wildlife corridors and stepping stones supporting resident and transient wildlife movement. Habitat fragmentation could threaten the viability of remaining natural resources. Maintaining wildlife corridors and habitat connectivity is essential for wildlife survival and is increasingly important considering habitat loss and climate change.

Generally, the interior of the city is developed. However, there is open space area suitable for wildlife habitat in the undeveloped areas. Figure 5.4-4 identifies the Santa Monica–Sierra Madre Connection wildlife movement corridor in the city and the Tierra Rejada Valley Critical Wildlife Passage Area immediately adjacent to the city's southeast border. A statewide interagency workshop was conducted in 2000 to delineate habitat linkages critical for preserving the state's biodiversity and identified the Santa Monica–Sierra Madre Connection as a chain of linkages that connect the Santa Monica, Simi, Santa Susana, and Sierra Madre ranges, addressing 2 of the 15 landscape linkages identified as irreplaceable and imminently threatened. The Santa Monica-Sierra Madre Connection linkage serves to connect the Los Padres and Angeles national forests. It covers very diverse ecological settings and encompasses several major vegetation types. It is one of the few remaining coastal-to-inland connections in the South Coast ecoregion. The final linkage design covers approximately 398,944 acres, of which 75 percent is already protected. It has several main strands, reflecting variation in habitat needs of different sets of target species. The Tierra Rejada Valley CWPA has been identified as a critical link that facilitates animal movement between the Santa Monica Mountains and the Santa Susana Mountains to the north.

Two sections of the Santa Monica–Sierra Madre Connection corridor traverse Moorpark from north to south. The Santa Monica–Sierra Madre Connection occurs within the eastern half of the city and branches around Moorpark College and residential developments that largely restrict wildlife movement through this area. The western segment of the Santa Monica–Sierra Madre Connection corridor that runs directly to the east of the Moorpark Highlands residential area is especially impacted. South of this development is the SR-118 overpass and riparian habitat associated with Arroyo Simi. The western branch is fragmented by existing industrial and residential developments and includes the Moorpark Highlands Specific Plan. The area connecting the western branch through the Specific Plan area could be further fragmented by the extension of SR-23 and North Hills Parkway, a potential bypass route for SR-118.

The Tierra Rejada Valley has also been identified as a critical link that facilitates animal movement between the Santa Monica Mountains and the Santa Susana Mountains to the north. In addition to these linkages, open spaces areas within the built environment of the city provide refuge for some wildlife species, particularly birds and small animals such as bats, lizards, and butterflies. Urban forests and street trees, both native and some nonnative species, provide habitat for a high diversity of birds and bats. In urbanized areas, bats use trees and man-made structures for daytime and nighttime roosts. Established neighborhoods, golf courses, and parks typically have mature trees and may have water features, both important elements that provide food and cover for wildlife. Orchards and some other types of agricultural land uses may also offer some habitat value.

Future development in accordance with the Moorpark General Plan 2050 could disrupt the wildlife linkages described above. As noted above, extension of SR-23 and North Hills Parkway as a potential bypass for SR-118 could fragment the corridor.

The Conservation Element identifies policies to reduce impacts to wildlife movement:

- **Policy COS-1.18 Wildlife corridors.** Adopt land use regulations that consider, complement and support state, regional, and county-adopted wildlife corridors, including the Ventura County Wildlife Corridor Overlay Zone and evaluate the appropriateness of designating additional corridors.
- **Policy COS-1.20 Open space acquisition.** Explore acquisition of new open space areas, including privately owned parcels located adjacent to or within recognized critical habitats and wildlife corridors.

Despite adherence to the proposed Moorpark General Plan 2050 policies, development within the city could still interfere with the regional and local wildlife movement connections. As stated above, future projects considered for approval by the City would require biological resources assessments of each respective project site by a qualified biologist. Mitigation measures would be required if impacts to wildlife movement and/or migration are identified. Consequently, impacts to wildlife movement are considered potentially significant in the absence of further biological assessment.

Level of Significance Before Mitigation: Potentially significant.

Impact 5.4-5: Migratory birds known to occur in Moorpark would be protected under the Migratory Bird Treaty Act. [Threshold B-4 (part)]

In addition to sensitive bird species (see Table 5.4-3), a number of migratory bird species are known to occur within Moorpark (see Table 5.4-3). Buildout of the proposed project could impact these migratory birds through future development and removal of vegetation that could be used for nesting. Review of the CNDDB indicates nearby occurrences of special status migratory bird species including the least Bell's vireo, yellow warbler (*Setophaga petechia*), willow flycatcher, white-tailed kite (*Elanus leucurus*), and yellow-breasted chat (*Icteria virens*). Ground nesting species are likely to nest in the grassland habitat and more open natural areas. Native trees and shrubs provide nesting habitat for numerous songbird species. Both native and landscaped trees can be utilized for nesting by migratory birds, and many species have adapted to urban environments. Bridges, buildings, and other artificial structures commonly support nesting passerines and raptors. Project activities during the breeding season of nesting birds could result in the incidental loss of fertile eggs or nestlings, or otherwise lead to nest abandonment. Development associated with the Moorpark General Plan 2050 could also lead to the loss of foraging habitat for sensitive bird species.

The Migratory Bird Treaty Act administered by the USFWS governs the taking, killing, possession, transportation, and importation of migratory birds, their eggs, parts, and nests. It prohibits the take, possession, import, export, transport, sale, purchase, barter, or offering of these activities, except under a valid permit or as permitted in the implementing regulations. In addition, California law, particularly relevant statutes in the Fish and Game Code, provide protections for birds and their active nests by prohibiting:

- Take of a bird, mammal, fish, reptile, or amphibian. (CFGC Section 2000)
- Take, possess, or needlessly destroy the nest or eggs of any bird. (CFGC Section 3503)
- Take, possess, or destroy any bird of prey in the orders Strigiformes (owls) and Falconiformes (such as falcons, hawks and eagles) or the nests or eggs of such bird. (CFGC Section 3503.5)
- Take or possess any of the 13 fully protected bird species listed in CFGC Section 3511.
- Take any nongame bird (i.e., bird that is naturally occurring in California that is not a game bird, migratory game bird, or fully protected bird). (CFGC Section 3800)
- Take or possess any migratory nongame bird as designated in the Migratory Bird Treaty Act or any part of such bird, except as provided by rules or regulations adopted by the Secretary of the Interior under the Migratory Bird Treaty Act. (CFGC Section 3513)
- Take, import, export, possess, purchase, or sell any bird (or products of a bird), listed as an endangered or threatened species under the California Endangered Species Act unless the person or entity possesses an Incidental Take Permit or equivalent authorization from CDFW. (CFGC Sections 2050 et seq.)

Additional mitigation requiring preconstruction general nesting bird surveys is provided to ensure that active nests and suitable nesting habitats are not impacted during the general avian breeding season. Impacts to migratory birds are considered potentially significant in the absence of mitigation.

Level of Significance Before Mitigation: Potentially significant.

Impact 5.4-6: Future projects in accordance with the Moorpark General Plan 2050 would be required to comply with the Moorpark Highland HCP, and Moorpark's local biological resources policies and ordinances. [Thresholds B-5 and B-6]

No CDFW-permitted NCCPs or HCPs occur within the City of Moorpark or County of Ventura (see Figure 5.4-3) However, the City of Moorpark has adopted local regulations for the protection of biological resources.

Section 12.08, Trees, Shrubs, and Plants, and Chapter 12.12, Historic Trees, of the Moorpark Municipal Code protects historic, mature, and native trees in the city. The City prohibits removal or harm to trees covered under these ordinances. The City's ordinance has requirements for diseased tree removal to prevent the spread of tree pests and diseases. In addition, the City has a Hillside Management ordinance (Chapter 17.38 of the Municipal Code) that requires submittal of a biological resources report for discretionary projects in hillside areas. In hillside areas, habitat and the potential presence of any sensitive habitat and unique, rare or endangered plant or animal species is required to be identified and mapped. Implementation of the Moorpark General Plan 2050 would not conflict with these local ordinances.

The City's Municipal Code also has specific requirements for development in the Moorpark Highlands Specific Plan (Chapter 17.74). The zoning code established an HCP for the natural open space zone areas within the Moorpark Highland Specific Plan that are required to remain ungraded and undeveloped (with the exception of roadway and infrastructure improvements necessary for the construction of Spring Road).

Compliance with Moorpark Highlands HCP and the City's municipal code would protect these resources. These policies would also protect these local resources.

- **Policy COS-1.16 Ecologically Significant Resource Areas.** Maintain, restore, and enhance ecologically significant resource areas in their natural state to the greatest extent possible. Limit development in these areas to compatible low-intensity uses with adequate provisions to protect sensitive resources, including setbacks around resource areas.

- **Policy COS-1.17 Native habitat protection.** Require that native vegetation and habitat are retained where feasible to support the health of local wildlife populations.

Implementation of the Moorpark General Plan 2050 would not conflict with an adopted HCP, NCCP, or local ordinance. Therefore, impacts are less than significant

Level of Significance Before Mitigation: Less than significant.

5.4.4 Relevant General Plan Policies

The following are relevant policies of the Moorpark General Plan 2050, which may contribute to reducing potential biological resources impacts as a result of implementation of the proposed project.

Conservation Element

Water Quality

- **Policy COS-1.12 Riparian preservation.** Require that new development preserve natural watercourses and riparian habitat where they occur, either by avoidance or through ecologically-sensitive design, like clustering buildings, restoring riparian habitat, and purchasing development rights or easements.

Biological Resources

- **Policy COS-1.16 Ecologically Significant Resource Areas.** Maintain, restore, and enhance ecologically significant resource areas in their natural state to the greatest extent possible. Limit development in these areas to compatible low-intensity uses with adequate provisions to protect sensitive resources, including setbacks around resource areas.

- **Policy COS-1.17 Native habitat protection.** Require that native vegetation and habitat are retained where feasible to support the health of local wildlife populations.

- **Policy COS-1.18 Wildlife corridors.** Adopt land use regulations that consider, complement and support state, regional, and county-adopted wildlife corridors, including the Ventura County Wildlife Corridor Overlay Zone and evaluate the appropriateness of designating additional corridors.

- **Policy COS-1.19 Biological resources evaluation.** Require a biological resources evaluation prepared according to current state and federal protocols for projects with the potential to impact rare, threatened, endangered, or special-status species or critical habitat. If the evaluation determines that the project would impact rare, threatened, endangered, or special-status species or critical habitat, require that project proponents consult with the appropriate federal, state, and regional agencies and mitigate project impacts in accordance with state and federal law.

- **Policy COS-1.20 Open space acquisition.** Explore acquisition of new open space areas, including privately owned parcels located adjacent to or within recognized critical habitats and wildlife corridors.

5.4.5 Level of Significance Before Mitigation

Upon implementation of regulatory requirements and standard conditions of approval, some impacts would be less than significant: 5.4-6.

Without mitigation, these impacts would be **potentially significant**:

- **Impact 5.4-1** Sensitive plant and animal species known to occur within Moorpark could be adversely impacted by development in accordance with the Moorpark General Plan 2050.
- **Impact 5.4-2** Buildout of the Moorpark General Plan 2050 could potentially impact wetlands and riparian resources in the City.
- **Impact 5.4-3** Development pursuant to the proposed project may impact waters and wetlands jurisdictional to the USACE, CDFW, or Los Angeles RWQCB.
- **Impact 5.4-4** Development pursuant to the proposed Moorpark General Plan 2050 could adversely impact wildlife movement in the Santa Monica–Sierra Madre Connection Corridor.
- **Impact 5.4-5** Migratory birds known to occur in Moorpark could be adversely impacted during construction activities.

5.4.6 Mitigation Measures

Impact 5.4-1

BIO-1a **Biological Resources Assessment.** Applicants for future development projects on non-infill sites with suitable natural habitat (except for infill redevelopment project, subject to the discretion of the Community Development Director), shall conduct a biological resources assessment of the proposed project footprint (including proposed access roads, proposed staging and laydown areas, and a suitable buffer surrounding the project footprint). The biological resources assessment shall be conducted by a qualified biologist and summarized in a biological resources letter report or biological resources technical report that will be submitted to the Moorpark Community Development Department for review and approval prior to be granted a grading permit

BIO-1b **Biological Reconnaissance-Level Survey**. The biological reconnaissance-level survey shall include, but not be limited to:

- An analysis of available literature and biological databases including but not limited to: California Department of Fish and Wildlife (CDFW); California Natural Diversity Database (CNDDB); California Native Plant Society (CNPS) Inventory of Rare and Endangered Plants of California, National Wetland Inventory Database (NWI); USGS National Hydrographic Dataset (NHD); EcoAtlas; and database searches of the US Fish and Wildlife Service Critical Habitat, Environmental Conservation Online System (ECOS), and Information, Planning, and Conservation System (IPaC). The literature review shall be performed prior to the field survey to identify sensitive biological resources that were reported previously from the proposed development project vicinity

and to help determine the type of sensitive biological resources that may be in the survey area.

- A review of current land use and land ownership within the proposed development project vicinity.
- A field assessment survey that includes mapping vegetation communities in the proposed development project (including but not limited to project footprint, proposed access roads, staging and laydown areas, and a suitable buffer) utilizing the Manual of California Vegetation, 2nd edition (MCV) and the National Vegetation Classification System (NVCS) or the currently accepted standard for vegetation mapping and classification. An evaluation of each mapped vegetation community's State and Global rarity ranks shall be determined using CDFW's Vegetation Classification and Mapping Program (VegCAMP).
- An evaluation of the proposed development project's potential to support special status plant and wildlife species.
- An evaluation of nesting habitat for migratory and special status bird species.
- An evaluation of potential impacts to bats and roosts from ground-disturbing activities.
- A general assessment of potential jurisdictional areas, including wetlands and riparian habitats.
- An evaluation of potential local and regional wildlife movement corridors.

BIO-1c **Focused Species Surveys**. If one or more special status plant or animal species has the potential to occur within the proposed development project area (including but not limited to project footprint, proposed access roads, staging and laydown areas, and a suitable buffer), a qualified biologist shall conduct additional focused surveys for said species using the most recently updated protocols recommended by natural resource agencies or, if not available, standards accepted in the professional biological community to survey that taxonomic group, community, or species. If an established protocol is not available for a special status species, the qualified biologist will consult with the City and CDFW or USFWS to determine the appropriate survey protocol. The focused species survey(s) will be at a level to determine the presence/absence of these species and to adequately evaluate potential direct and/or indirect impacts to these species. Adjoining properties shall also be surveyed (as access permits) where direct or indirect project effects, such as those from fuel modification or herbicide application, could potentially extend off-site. To the extent possible, the focused species surveys should be conducted during nondrought years at the time of year when species are both evident and identifiable. The focused survey shall record the location and boundary of special status species by use of global positioning system (GPS). The number of individuals shall be counted (if population is small) or estimated (if population is large). If applicable, information about the percentage of individuals in each life stage should be provided (seedlings, reproductive individuals, adults, nestlings, juveniles, transients or

migrant individuals, etc.). If feasible, images of the target species and representative habitats should be included to support information and descriptions. Results of focused species surveys shall be summarized in the proposed development project's Biological Technical Report.

BIO-1d **Biological Resources Report.** The results of the biological survey for proposed development projects with no significant impacts may be presented in a biological survey letter report. For proposed development projects with significant impacts that require mitigation to reduce the impacts to below a level of significance, and/or agency consultation and permitting, the results of the biological survey shall be presented in a biological technical report. The impact analysis shall consider impacts from areas subject to fuel modification and grading to accommodate the development.

BIO-2 **Special-Status Species, Sensitive Habitats, Wetlands, Other Non-wetland Waters, Native Wildlife Nursery Sites, and Wildlife Corridors**. If a sensitive biological resource is identified during field surveys (see BIO-1b and BIO-1c), the City shall require implementation of mitigation measures at the project level that fully account for the adversely affected resource. To the maximum extent feasible, mitigation measures should adhere to the following order of priority to reduce adverse impacts of a proposed project to the resource: avoid impacts, minimize impacts, and compensate for impacts. Mitigation measures shall be used on a project-level basis and be tailored to on-site conditions and sensitive biological resources present.

- **Priority 1, Avoidance of Impacts.** Proposed development shall avoid impacts to the maximum extent feasible by not taking certain actions or parts of an action. Projects shall be sited to avoid direct or indirect impacts on the resource and include measures such as implementing no-disturbance buffers (e.g., nesting bird buffer areas during construction, siting staging areas outside buffer area) or implementing project-specific design features (e.g., wildlife-friendly fencing and lighting in a wildlife corridor), such that indirect adverse effects of project development are avoided. This shall include flagging all plants and/or perimeter of populations; stop-work buffers around plants and/or populations (e.g., flagged perimeter plus 50 feet); restrictions on ground-disturbing activities within protected areas; relocation of staging and other material piling areas away from protected areas; restrictions on herbicide use and/or type of herbicide and/or application method within 100 feet of sensitive plants; and worker education and training. This shall especially apply to the Tierra Rejada Vernal Pool Preserve in the Carlsberg Specific Plan area and designated critical habitat for Lyon's pentachaeta and Riverside fairy shrimp (*Streptocephalus woottoni*) in the southeast corner of Moorpark.
- **Priority 2, Minimize Impacts.** Proposed development shall be conditioned to minimize adverse impacts by limiting the degree or magnitude of the action and its implementation to less than significant to the maximum extent feasible. Other mitigation

measures may include reducing or eliminating the impact over time by preservation and maintenance operations during the life of the action.

Measures to mitigate the spread of invasive plant species and invasive wildlife species (e.g., New Zealand mudsnail) shall include but will not be limited to: cleaning of equipment, footwear, and clothing before entering a construction site and the identification and treatment of significant infestations of invasive plant species within a project site.

- **Priority 3, Offset Impacts.** Offsetting impacts can be done by replacing or providing substitute resources or by rectifying the impact by repairing, rehabilitating, or restoring the impacted environment.

  Offset mitigation ratios for protected sensitive resources will be established based on the rarity of the resource, quality of affected habitat associated with the resource, temporary and permanent losses to habitat function, the type of mitigation proposed (restoration, enhancement, preservation, establishment), and other requirements associated with state or federal permits. Mitigation ratios will be determined at the project level in consultation with the city, the qualified biologist, and, where applicable, federal or state agencies with jurisdiction over the resource (e.g., CDFW, USACE, USFWS).

If impacts on a protected sensitive biological resource are unavoidable, then the project proponent shall mitigate for the type of resource as follows:

- **Endangered, Rare, Threatened, or Candidate Species.** The applicant shall obtain incidental take authorization from USFWS (16 US Code Section 1531 et seq.) or CDFW (California Fish and Game Code Sections 2050–2115.5) prior to commencing development of the project site; apply minimization measures or other conditions required under the incidental take authorization; and provide equivalent compensation for the unavoidable losses of these resources, generally at a minimum ratio of 1:1. Compensation may include purchasing credits from a USFWS- or CDFW-approved mitigation bank or restoring or enhancing habitat within the project site or outside of the project site.
- **Special Status Species (not listed).** The applicant shall provide equivalent compensation for impacts on special status species by restoring or significantly enhancing existing habitat where the species occurs or by acquiring or protecting land that provides habitat function for affected species and is at least equivalent to the habitat function removed or degraded as a result of project implementation.

If impacts on sensitive habitats, wetlands, other nonwetland waters, riparian habitats, native wildlife nursery sites, and wildlife corridors cannot be avoided, the project applicant shall:

- **Federal- or State-Protected Sensitive Habitats.** Obtain the required regulatory authorization (e.g., Section 404 permits for impacts on waters of the United States, 401 water quality certification from the Regional Water Quality Control Board, a Streambed

Alteration Agreement for impacts on aquatic or riparian habitats within CDFW jurisdiction under Fish and Game Code Section 1600), and provide equivalent compensation for the unavoidable losses of the above-mentioned resources such that there is no net loss.

- **Other Protected Sensitive Habitats (includes sensitive natural communities, habitat connectivity and wildlife corridors, native wildlife nursery or overwintering sites).** Provide compensation for other protected sensitive habitats, which may include the restoration, enhancement, or preservation of the aforementioned habitats within or outside of the project site, or the purchasing of credits at an existing mitigation bank or in-lieu fee program deemed acceptable by the Moorpark Community Development Director.

All compensatory mitigation sites shall be protected in perpetuity through a conservation easement (if off-site), or deed restriction (or other comparable legal instrument) if on-site.

BIO-3 **Demarcate Work Area Boundary.** The proposed development proponent shall prevent impacts to unprotected common and sensitive vegetation communities in areas adjacent to the project area. Prior to the initial vegetation clearing activities or ground disturbance in new areas, the approved project grading limits shall be marked with stakes or other highly visible materials that will be clearly visible to equipment operators and biological monitors during all vegetation clearing or ground disturbing activities. All equipment operators and project personnel shall be instructed about the restrictions the boundary markers represent and that vegetation removal or other disturbance outside of the boundary markers shall be avoided.

BIO-4 **Preconstruction Special Status Species Surveys.** If sensitive biological resources are identified as having potential to occur within or immediately adjacent to the proposed development project area, a preconstruction special status species survey shall be conducted by a qualified biologist no more than 14 days prior to ground disturbing activities to ensure unsubstantiated impacts are avoided or minimized to the extent feasible. In addition, for species with potential to occur within or adjacent to the proposed development project area and having species-specific preconstruction or take avoidance survey guidelines (e.g. burrowing owl), surveys shall be conducted in accordance with the most recent survey guidelines by a qualified biologist for that species.

BIO-5 **Worker Environmental Awareness Education.** If sensitive biological resources are known to occur within or adjacent to the proposed development project area, a project-specific contractor training program shall be developed and implemented to educate project contractors about the sensitive biological resources within and adjacent to the proposed development project area and the measures being implemented to avoid and/or minimize impacts to these species or their habitat. A qualified biologist shall develop and implement the contractor training program.

BIO-6 **Biological Monitoring.** If sensitive biological resources are present within or adjacent to the proposed development project area and impacts may occur from implementation of construction activities, a qualified biological monitor may be required during a portion or all of the construction activities to ensure impacts to the sensitive biological resources are avoided or minimized to the extent feasible. The specific biological monitoring requirements shall be evaluated on a project-by-project basis. The qualified biological monitor shall be approved by the City on a project-by-project basis based on applicable experience with the sensitive biological resources that may be impacted.

Impact 5.4-2

Mitigation Measures BIO-1 through BIO-6 are also applicable to Impact 5.4-2.

BIO-7 **Aquatic Resources Delineation and Regulatory Permitting.** The City of Moorpark shall require applicants of development projects that have the potential to affect jurisdictional resources to contract with a qualified biologist to conduct a jurisdictional delineation to map the extent of wetlands and nonwetland waters; determine jurisdiction; consider changes in upstream and downstream drainage patters, runoff, and sedimentation; and assess potential impacts (including an evaluation of potential changes in upstream and downstream drainage patterns, runoff, and sedimentation). The delineation shall be conducted pursuant to the U.S. Fish and Wildlife Service wetland definition adopted by the California Department of Fish and Wildlife. The results of the delineation shall be presented in a wetland delineation report and shall be incorporated into the CEQA document(s) required for approval and permitting of the proposed development project.

Applicants of development projects that have the potential to impact jurisdictional features, as identified in the wetland delineation letter report, shall obtain permits and authorizations from the US Army Corps of Engineers for a Section 404 Clean Water Act (CWA) Permit, to the California Department of Fish and Wildlife (CDFW) for a Section 1600 Lake or Streambed Alteration Agreement (SAA), and/or to the Regional Water Quality Control Board (RWQCB) for a Section 401 Water Quality Certification. The regulatory agency authorization(s) shall include impact avoidance and minimization measures as well as mitigation measures for unavoidable impacts. Specific avoidance, minimization, and mitigation measures for impacts to jurisdictional resources shall be determined through discussions with the regulatory agencies during the proposed development project permitting process and may include monetary contributions to a mitigation bank or habitat creation, restoration, or enhancement.

Impact 5.4-3

Mitigation Measure BIO-7 is also applicable to Impact 5.4-3.

Impact 5.4-4

BIO-8 **Habitat Connectivity/Wildlife Corridor Protection Measures.** The city of Moorpark shall require a habitat connectivity/wildlife corridor evaluation for future development projects that may impact existing connectivity areas and wildlife linkages identified in Figure 5.4-4, *Regional Wildlife Corridor*, of the Draft EIR, which includes the Santa Monica–Sierra Madre Connection corridor. The results of the evaluation shall be incorporated into the project's biological report required under Mitigation Measure BIO-1d. The evaluation shall also identify project design features that would reduce potential impacts and maintain habitat and wildlife movement. The city shall continue to work in partnership with the County of Ventura, wildlife agencies, organizations, and entities responsible for the protection, management, and enhancement of habitat connectivity and wildlife corridors. To this end, the city shall incorporate the following measures, to the extent practicable, for projects impacting wildlife movement corridors:

- Adhere to the applicable zoning standards.
- Encourage clustering of development.
- Avoid known sensitive biological resources and protect critical linkage areas in place with a minimum 1/2-mile buffer around pinch points, to maximum extent practicable).
- Require new or modified road crossings over streams, wetlands and riparian habitats to include bridging design features with bridge columns located outside the riparian habitat areas, when feasible.
- Avoid removal of native trees; large, dense-canopied nonnative trees; and understory vegetation. If impacts to trees cannot be avoided, trees should be replaced.
- Follow the existing shielded lighting requirements in the existing municipal code to provide reduced lighting adjacent to sensitive habitat areas.
- Encourage development plans that maximize wildlife movement.
- Provide buffers between development and wetland/riparian areas.
- Protect wetland/riparian areas through regulatory agency permitting process.
- Encourage wildlife-passable fence designs (e.g., 3-strand barbless wire fence) on property boundaries.
- Encourage preservation of native habitat on the undeveloped remainder of developed parcels.
- Minimize road/driveway development to help prevent loss of wildlife due to roadkill and habitat loss.

- Use native, drought-resistant plant species and trees in landscape design. Trees may include coast live oak (*Quercus agrifolia*) and California sycamore (*Platanus racemosa*) and other plants identified by the Audubon Society's Plants for Birds.
- Encourage participation in local/regional recreational trail design efforts.

Impact 5.4-5

BIO-9a **Pre-disturbance Nesting Bird Surveys.** The City of Moorpark shall require applicants for future development projects with suitable natural habitat, subject to the discretion of the Community Development Director, to contract with a qualified biologist with experience in conducting breeding bird surveys to conduct a preconstruction general nesting bird survey within all suitable nesting habitats that may be directly (active nest destruction, direct mortality) or indirectly (nest abandonment, exposure) impacted by active construction during the general avian breeding season (February 1 through August 31). The pre-disturbance surveys shall be conducted no more than 5 days prior to initiation of construction inclusive of staking and fencing of project limits, demolition activities, staging of equipment, and all vegetation trimming and removal activities (regardless of stage of construction). Results of pre-disturbance nesting bird surveys are typically valid for a period of 3 to 5 days. Additional pre-disturbance nesting bird surveys and/or nest monitoring may be required at the discretion of the qualified biologist based on observations of breeding behavior, phased removal of breeding bird habitat during the breeding season, establishment of nest buffers, delays in construction activities that could allow for breeding birds to establish a nest, or if the project is cleared/demolished/constructed over the course of multiple breeding seasons. Results will be summarized in a pre-disturbance survey report that describes the dates of the surveys, methods, results of the surveys, and any nest protection measures that will need to be employed. The pre-disturbance nesting bird survey report will be submitted to the City within 30 days of completion of the initial pre-disturbance nesting bird survey.

BIO-9b **Active Next Avoidance and No-Work Buffers.** If active nests of avian species protected by the Migratory Bird Treaty Act and Fish and Game Code are detected within the proposed development project area or within a 300-foot buffer (500-foot buffer for raptors and listed species) of the proposed development project area, a no-work buffer will be established around the nest (typically 300 feet for passerines and 500 feet for raptors and listed species) and construction shall be restricted in the area until the young have fledged; there is no evidence of a second attempt at nesting if the nest attempt has failed, as determined by the qualified biologist; or until appropriate protection measures (installation of noise and/or visual barriers, intermittent halting or rerouting of high noise-producing construction activities to other portions of the project area, biological monitoring, and/or noise monitoring to ensure effectiveness of no-work buffers and/or noise reduction measures, etc.) that respond to the specific situation have been developed and implemented in consultation with the City and regulatory agencies. A figure showing the locations of

no-work buffers established during the preclearance nesting survey shall be included in the predisturbance survey report (BIO-9a).

BIO-9(c) **Nest Monitoring.** Periodic nest monitoring will be conducted at the discretion of the qualified biologist to ensure compliance with established no-work buffers and document progression of the nest. The qualified biologist will monitor the nest from a distance and determine active/inactive status based on direct observations or evidence of breeding behavior (nest exchanges, food carries, fecal sac removal, nestling vocalizations, etc.). The qualified biologist will keep the nest monitoring as brief as possible to avoid causing undue stress to the adult(s) and young. For nests where contents are difficult to determine (e.g., gourd nests, cavity nests) or nests that seem inactive prior to the estimated fledge date, the nest will be considered inactive once nesting activity is no longer observed at the nest site during two consecutive monitoring visits by the qualified biologist. Two consecutive monitoring visits may not be necessary if strong evidence (e.g., nest is on the ground or evidence of predation on young) indicates the nest is no longer active or if the nest is unlikely to be affected by immediate project activities. Once a nest is deemed inactive by the qualified biologist and there is no evidence of a second nest attempt or other active nests in the same area, the biologist will deactivate the nest buffer and construction activities may resume in that area. CDFW will not need to concur with the nest "deactivation" determination prior to work resuming in the area. Project-related activities that result in loss of a nest ("take") will be immediately reported to the city and appropriate agencies (CDFW, USFWS). A summary of all nest monitoring activities (if any) will be submitted to the City in a brief memo at the completion of each breeding season.

5.4.7 Level of Significance After Mitigation

Impact 5.4-1

Buildout of the Moorpark General Plan would impact sensitive plant and animal species in the city. Mitigation Measures BIO-1a through BIO-1d would require that future development projects conduct a biological resources assessment in compliance with the CESA and FESA to determine if sensitive biological resources could be present within and/or adjacent to the proposed development project. Mitigation Measures BIO-2 through BIO-5 would require preconstruction surveys and education prior to the start of ground disturbing activities. Mitigation Measure BIO-6 would require biological resources monitoring during construction if sensitive species are present. Sensitive biological resources include special status species, sensitive natural communities, wetlands and jurisdictional waters, wildlife movement corridors and nursery sites, and other items identified in Appendix G of the CEQA Guidelines. Each project proponent would be responsible for determining the potential for occurrence of and impacts to sensitive vegetation communities, special status species, wildlife movement corridors, and nursery sites.

Implementation of Mitigation Measures BIO-1 through BIO-6 would ensure that impacts to special status species are avoided and/or minimized. Impact 5.4-1 would be less than significant.

Impact 5.4-2

Growth accommodated through long-term buildout of the city would result in significant loss of habitat. The CESA and FESA regulate the loss of habitat as it pertains to special status plant and animal species. Coordination with the USFWS and CDFW would ensure that, on a project-by-project basis, habitat is replaced or conserved in accordance with the agency-determined ratios if special status plant and animal species occur or are likely to occur on-site, which will be determined through consultation. Implementation of Mitigation Measures BIO-1 through BIO-7 and implementation of the Moorpark Highlands HCP would mitigate project-specific impacts to biological resources in the City of Moorpark to less-than-significant levels. However, in the absence of an MSHCP for Ventura County, the cumulative loss of habitat and sensitive species from buildout of the Moorpark General Plan 2050 in Ventura County is considered **significant and unavoidable.**

Impact 5.4-3

Buildout of the Moorpark General Plan 2050 could cause the loss of undetermined amounts of riparian habitat, including jurisdictional waters. Mitigation Measure BIO-7 would require preparation of jurisdictional delineations mapping waters, wetlands, and riparian habitats jurisdictional to the USACE, CDFW, and RWQCB and specifying impacts to such resources. Mitigation Measure BIO-7 would also require project applicants to obtain permits and authorizations from the USACE, CDFW, and RWQCB specifying measures to avoid, minimize, and mitigate impacts. Impacts to jurisdictional riparian habitats would be less than significant.

Impact 5.4-4

Implementation of the Moorpark General Plan 2050 would involve developments in areas that may impact existing connectivity areas and wildlife linkages. Mitigation Measure BIO-8 would require habitat connectivity/wildlife corridor evaluations for each project proposed in an existing connectivity area or wildlife linkage, as identified in Figure 5.4-4, *Regional Wildlife Corridor*, including the Santa Monica–Sierra Madre Connection corridor. Mitigation Measure BIO-8 specifies measures to be taken, to minimize impacts on wildlife movement and preserve viable linkages in place. Impacts on wildlife movement would be less than significant.

Impact 5.4-5

Buildout of the Moorpark General Plan 2050 could impact migratory birds protected under the Migratory Bird Treaty Act and the California Fish and Game Code. Mitigation Measures BIO-9 through BIO-9c would require preconstruction nesting bird surveys and avoidance of impacts (direct and indirect) to active nests, avoidance, and active nest monitoring of bird species protected by federal and state laws. Impacts to migratory birds would be less than significant.

5.4.8 References

ECORP Consulting, Inc. 2022, September 14. Biological Resources Technical Report for the City of Moorpark General Plan Update – Final Report. Ventura County, California.

5.5 CULTURAL RESOURCES

Cultural resources include archaeological and historical resources. Tribal cultural resources are discussed in Section 5.18, *Tribal Cultural Resources*, of this Draft Environmental Impact Report (DEIR). Archaeology studies human artifacts, such as places, objects, and settlements that reflect group or individual religious, cultural, or everyday activities. Historical resources include sites, structures, objects, or places that are at least 50 years old and are significant for their engineering, architecture, cultural use or association, etc. In California, historic resources cover human activities over the past 12,000 years. Cultural resources provide information on scientific progress, environmental adaptations, group ideology, or other human advancements. This section of the DEIR evaluates the potential for implementation of the project to impact cultural resources in the city of Moorpark. The analysis in this section is based in part on the following information:

- *Cultural Resources Technical Report: Existing Conditions,* ECORP Consulting, September 2020.
- *Cultural Resources Sensitivity Model for the Moorpark General Plan Update, City of Moorpark, Ventura County*, ECORP Consulting, October 15, 2020.

Complete copies of these studies are included as Appendices F1 and F2 of this DEIR.

5.5.1 Environmental Setting

5.5.1.1 REGULATORY BACKGROUND

Federal Regulations

National Historic Preservation Act

The National Historic Preservation Act of 1966 coordinates public and private efforts to identify, evaluate, and protect the nation's historic and archaeological resources. The act authorized the National Register of Historic Places, which lists districts, sites, buildings, structures, and objects that are significant in American history, architecture, archaeology, engineering, and culture.

Section 106 (Protection of Historic Properties) of the Act requires federal agencies to take into account the effects of their undertakings on historic properties. Section 106 Review ensures that historic properties are considered during federal project planning and implementation. The Advisory Council on Historic Preservation, an independent federal agency, administers the review process with assistance from state historic preservation offices.

Archaeological Resources Protection Act

The Archaeological Resources Protection Act of 1979 regulates the protection of archaeological resources and sites on federal and Indian lands.

Native American Graves Protection and Repatriation Act

The Native American Graves Protection and Repatriation Act is a federal law passed in 1990 that mandates museums and federal agencies to return certain Native American cultural items—such as human remains, funerary objects, sacred objects, or objects of cultural patrimony—to lineal descendants or culturally affiliated Indian tribes.

National Register of Historic Places

The National Register of Historic Places (NRHP) is the nation's official list of buildings, structures, objects, sites, and districts worthy of preservation because of their significance in American history, architecture, archeology, engineering, and culture. The NRHP recognizes resources of local, state, and national significance which have been documented and evaluated according to uniform standards and criteria.

Authorized under the National Historic Preservation Act, the NRHP is part of a national program to coordinate and support public and private efforts to identify, evaluate, and protect historic and archeological resources. The NRHP is administered by the National Park Service, which is part of the US Department of the Interior.

To be eligible for listing in the NRHP, a resource must meet at least one of the following criteria:

- Is associated with events that have made a significant contribution to the broad patterns of our history.
- Is associated with the lives of persons significant in our past.
- Embodies the distinctive characteristics of a type, period or method of construction, represents the work of a master, possesses high artistic values, or represents a significant and distinguishable entity whose components may lack individual distinction.
- Has yielded, or may be likely to yield, information important in history or prehistory.

To retain historic integrity, a property will always possess several and often most of the aspects of integrity—location, design, setting, materials, workmanship, feeling, and association.

State Regulations

California Public Resources Code

Archaeological, paleontological, and historical sites are protected under a wide variety of state policies and regulations in the California Public Resources Code (PRC). In addition, cultural and paleontological resources are recognized as nonrenewable resources and receive protection under the PRC and CEQA.

PRC Sections 5020 to 5029.5 continued the former Historical Landmarks Advisory Committee as the State Historical Resources Commission. The commission oversees the administration of the California Register of Historical Resources (CRHR) and is responsible for designating State Historical Landmarks and Historical Points of Interest.

PRC Sections 5079 to 5079.65 define the functions and duties of the Office of Historic Preservation, which administers federal- and state-mandated historic preservation programs in California as well as the California Heritage Fund.

PRC Sections 5097.9 to 5097.991 provide protection to Native American historical and cultural resources and sacred sites, identify the powers and duties of the Native American Heritage Commission, require that descendants be notified when Native American human remains are discovered, and provide for treatment and disposition of human remains and associated grave goods.

California Register of Historical Resources

The State Historical Resources Commission has designed the CRHR program for use by state and local agencies, private groups, and citizens to identify, evaluate, register, and protect California's historical resources. The CRHR is the authoritative guide to the state's significant historical and archeological resources.

The CRHR program encourages public recognition and protection of resources of architectural, historical, archeological, and cultural significance; identifies historical resources for state and local planning purposes; determines eligibility for state historic preservation grant funding; and affords certain protections under CEQA.

To be eligible for listing in the CRHR, a resource must meet at least one of the following criteria:

- Is associated with events that have made a significant contribution to the broad patterns of local or regional history or the cultural heritage of California or the United States.
- Is associated with the lives of persons important to local, California, or national history.
- Embodies the distinctive characteristics of a type, period, region, or method of construction; represents the work of a master; or possesses high artistic values.
- Has yielded, or has the potential to yield, information important to the prehistory or history of the local area, California or the nation

In addition to having significance, resources must have integrity for the period of significance. The period of significance is the date or span of time within which significant events transpired or significant individuals made their important contributions. Integrity is the authenticity of a historical resource's physical identity as evidenced by the survival of characteristics or historical fabric that existed during the resource's period of significance. Alterations to a resource or changes in its use over time may change its historical, cultural, or architectural significance. Simply, resources must retain enough of their historical character or appearance to be recognizable as historical resources and to convey the reasons for their significance. A resource that has lost its historical character or appearance may still have sufficient integrity for the CRHR if, under Criterion 4, it maintains the potential to yield significant scientific or historical information or specific data.

California Historical Landmarks

California Historical Landmarks are buildings, structures, sites, or places that have been determined to have statewide historical significance. The resource must be approved for designation by the county board of supervisors or the city/town council in whose jurisdiction it is located; be recommended by the State Historical Resources Commission; and be officially designated by the Director of California State Parks. A resource must meet at least one of the following criteria:

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

California Points of Historical Interest

California Points of Historical Interest are sites, buildings, features, or events that are of local (city or county) significance and have anthropological, cultural, military, political, architectural, economic, scientific or technical, religious, experimental, or other value. Points of Historical Interest designated after December 1997 and recommended by the State Historical Resources Commission are also listed in the CRHR. No historical resource may be designated as both a landmark and a point. If a point is subsequently granted status as a landmark, the point designation is retired.

To be eligible for designation as a Point of Historical Interest, a resource must meet at least one of the following criteria:

- Be the first, last, only, or most significant of its type within the local geographic region (city or county).
- Be associated with an individual or group having a profound influence on the history of the local area.
- Be a prototype of, or an outstanding example of, a period, style, architectural movement or construction or be one of the more notable works or the best surviving work in the local region of a pioneer architect, designer or master builder.

California Historic Building Code

The California Historic Building Code—California Code of Regulations, Title 24, Part 8—provides regulations for the preservation, restoration, rehabilitation, relocation, or reconstruction of buildings or properties designated as qualified historical buildings or properties. The California Historic Building Code is intended to provide solutions for the preservation of qualified historical buildings or properties, to promote sustainability, to provide access for persons with disabilities, to provide a cost-effective approach to preservation, and to provide for the reasonable safety of the occupants or users.

Local Regulations

City of Moorpark Municipal Code

Several ordinances in the Moorpark Municipal Code provide regulations to protect cultural and historical resources within the city limits. As defined in municipal code Section 15.36.010, Purpose, the purpose of Chapter 15.36, Historic Preservation, is to provide for the identification, protection, enhancement, perpetuation, and use of historic landmarks that reflect special elements of the City's historical heritage and to promote the general welfare. This is done by encouraging public knowledge, understanding, and appreciation of the City's past; fostering civic pride; safeguarding the heritage of the City; protecting and enhancing property values in the city and increasing economic and financial benefits to the city and its inhabitants; identifying and resolving conflicts between the preservation of historical landmarks and alternative land uses; preserving historic building materials; taking reasonable and necessary steps to safeguard the property rights of the owners whose building or structure is declared to be a landmark; promoting the use of landmarks; and promoting awareness of the economic benefits of historic preservation.

Section 15.36.020, Definitions, provides definitions for terms used in the Historic Preservation Code. Section 15.36.030, Establishment of a historical preservation commission, and Section 15.36.040, Powers and duties of the historical preservation commission, establish and define the powers and duties of the Historical Preservation Commission. Section 15.36.050, Public hearings, establishes guidelines for public hearings

Section 15.36.060, Landmark designation, outlines procedures for the designation of historic landmarks. An application to designate or de-designate a building, site, tree, or structure as a landmark shall be made by or with written consent of the property. The building, site, tree, or structure may be designated as a landmark if it meets one or more of the following criteria: (1) it is associated with persons or events significant n local, state, or national history; (2) it reflects or exemplifies a particular period of national, state, or local history; (3) it embodies the distinctive characteristics of a type, style, or period of architecture or of method of construction; (4) it is strongly identified with a person or persons who significantly contributed to the culture, history, or development of the area; (5) it is one of the few remaining examples om the area possessing distinguishing characteristics of an architectural type of specimen; (6) it is a notable work of an architect or master builder whose individual work has significantly influenced the development of the area; (7) it embodies elements of architectural design, detail, materials or craftsmanship that represents a significant architectural innovation; (8) it has a unique location or singular physical characteristics representing an established and familiar visual feature of a neighborhood, community or the area; (9) it has unique design or detailing; (10) it is a particularly good example of a period of style; or (11) it contributes to the historical or scenic heritage or historical or scenic properties of the area (to include, but not limited to landscaping, light standards, trees, curbing and signs). A landmark designation may be removed from a building, site, tree, or structure if it is found that it no longer meets one or more of the criteria above.

Section 15.36.070, Certificate of appropriateness for work affecting landmarks, outlines the requirements and procedures for obtaining a certificate of appropriateness for work affecting landmarks. The applicant shall submit, together with the application for work, all plans, materials, and documents that are related to the work proposed and are required for proper review of the proposed work, as well as a clear photograph of the

landmark, a brief description of the intended work, and samples of replacement materials and pain for comparison with the existing materials and paints. The director shall approve, conditionally approve, or deny the application for relocation, demolition, or other work after determining whether it meets the corresponding criteria.

Section 15.36.080, Dangerous conditions, provides for work on landmarks in the event of dangerous conditions. Section 15.36.090, Duty to keep in good repair, stipulates that landmarks shall be kept in good repair.

5.5.1.2 EXISTING CONDITIONS

Historical Setting

The first significant European settlement of California began during the Spanish Period (1769 to 1821), when 21 missions and 4 presidios were established between San Diego and Sonoma. Although primarily along the coast, the missions dominated the majority of the California region during this period. The purpose of the missions and presidios was to establish Spanish economic, military, political, and religious control over the Alta California territory. This included the forced conversion of the native population to Spanish colonial society and Catholicism, which often consisted of subjugating Indians into a life of servitude to Spanish citizens. During this time, the region fell largely under the control of the Mission San Buenaventura, located within the present-day City of Ventura.

The Mexican Period (1821 to 1848) began with the success of the Mexican Revolution in 1821, but changes to the mission system were slow to follow. When secularization of the missions occurred in the 1830s, the vast land holdings of the missions in California were divided into large land grants called ranchos. The Mexican government granted ranchos throughout California to Spanish and Hispanic soldiers and settlers. The region encompassing the study area fell within the Rancho Simi (also known as Rancho San José de Nuestra Señora de Altagracia y Simi), which was the first land grant in Ventura County. The 113,009-acre land grant was awarded by the Mexican government to Santiago Pico in 1795. The property included land from the Santa Susana Mountains to west of Moorpark. Pico died in 1815 and his sons were regranted the rancho in 1821. The name "Simi" was based on the Chumash village of Shimiji. The land grant encompasses today's Simi Valley and Moorpark. The Pico brothers built a two-room adobe in 1810 in Simi Valley and later sold the property in the 1830s. In 1889, Robert P. and Mary Strathearn purchased a portion of the Rancho Simi. The two-room adobe was later incorporated into the Strathearn family home. The Rancho Simi Adobe has been recognized as California State Landmark No. 979 and is located at the Strathearn Historical Park and Museum, approximately 4.5 miles southwest of Moorpark in the Simi Valley.

In 1848, the Treaty of Guadalupe Hidalgo ended the Mexican-American War and marked the beginning of the American Period (1848 to present). The discovery of gold the same year initiated the 1849 California Gold Rush, bringing thousands of miners and settlers to California, most of whom settled in the north. For settlers who chose to come to southern California, much of their economic prosperity was fueled by cattle ranching rather than by gold. This prosperity, however, came to a halt in the 1860s as a result of severe floods and droughts, which put many ranchers into bankruptcy.

Moorpark History

The City of Moorpark is in Ventura County. Ventura County was organized in 1873, and the City of Ventura has always been the county seat. The City of Moorpark was founded in 1900 and named for the well-known English variety of apricot known as the Moorpark apricot. A post office was first listed in 1904.

Historically, today's Moorpark was land within with the 113,000-acre Rancho Simi land grant. The land grant property was purchased by the Philadelphia and California Petroleum Company in hopes of discovering oil. The company discovered that the land did contain large quantities of oil and, in 1887, sold portions of the land to the Simi Land and Water Company, a land development group. Robert W. Poindexter, an investment banker from Los Angeles and the Secretary of the Simi Land and Water Company, obtained the title for what would become the City of Moorpark in 1887. Poindexter and his wife, Madeline, developed a small farming community west of today's Moorpark known as Fremontville or Fremont. Historically, the townsite of Fremontville was north of today's Los Angeles Avenue and south of Poindexter Avenue, at the Moorpark Estates. The townsite became nonactive and the streets were abandoned in 1900 by the county board of supervisors.

After the Southern Pacific Railway announced that it intended to relocate its Coastline rail service through Ventura County in the 1890s, the Poindexter couple laid out the town site of Moorpark around the railroad in 1900. A railroad depot was built by March 1900, helping to ensure that their application for a post office would be approved that year. Buildings from Fremontville were moved to High Street after the depot was constructed.

In 1904, the City's position was strengthened by the completion of tunnels through the Santa Susana Mountains. The train depot burned down in 1909, but a similar depot was rebuilt in its place the next year. In 1904, the Munger family moved to Moorpark and operated the Moorpark Hotel. In 1909, they sold their modest home on Charles Street to Frank and Mary Cornet. A grocery store was built on the corner of High and Walnut Streets and changed hands in 1911 and 1918. In 1905, the Moorpark Women's Fortnightly Club was founded.

Moorpark was home to a community of Methodists. Epworth, an earlier community north of Moorpark near Broadway Road, built a Wesley Chapel in 1894. When Epworth hit hard times, Methodists in Moorpark moved the Wesley Chapel to the northeast corner of Charles and Walnut Streets. Epworth is a 0.5 mile north of the northern limits of Moorpark. In 1919, the Methodists doubled the size of their chapel by moving and attaching another church building to it, this time the M.E. Fowler church from Somis. When the Methodists outgrew this church, it was used by Southern Baptists.

Early on, Moorpark developed agriculture as its main industry, first with dry land farming of hay, lima beans, black-eyed peas, and especially apricots on the valley floor surrounding the Arroyo Simi. Moorpark was dubbed the "apricot capital of the world," and by 1920 they were hosting an annual apricot festival. With increased irrigation, the town was able to grow walnuts and citrus, which gave farmers a higher return. In 1927, a theater was built on High Street and served as the only talking movie theater for many years.

After World War II, agriculture in Moorpark was supplemented with animal husbandry, especially turkey, chicken, and egg ranchers. The theater on High Street closed in the 1950s, as did the original Southern Pacific rail depot.

On November 12, 1957, the City of Moorpark, then populated by 1,100 people, was the first in the nation to use atomic energy, provided by the Southern Reactor Experiment from a small nuclear reactor in the nearby Simi Hills, built by Atomics International. Two weeks later, Edward R. Murrow's *See It Now* television program aired a program about the nuclear plant. While they continued to receive nuclear power for about three years, the main purpose of the Southern Reactor experiment was to demonstrate the feasibility of producing electricity through nuclear power plants and was a major milestone in President Dwight D. Eisenhower's Atoms for Peace program. In 1959, Atomics International was using its Simi reactor for experimental purposes, and it went through a partial meltdown.

The Southern Pacific rail depot in Moorpark was closed in the late 1950s, and by 1964 it was torn down. A Richfield gas station was constructed on the property and later demolished to make way for a bank, whose building now houses the Moorpark Chamber of Commerce. By the 1970s, agricultural land within Moorpark began to give way to housing. Moorpark was incorporated as a city in 1983, providing a boost to industry and housing in the area.

Cultural Setting

A cultural resources records search for the City of Moorpark was completed by South Central Coastal Information Center (SCCIC) staff of the California Historical Resources Information System (CHRIS) at California State University, Fullerton, on June 15, 2020. The purpose of the records search was to determine the extent of previous surveys and to identify areas within city limits containing previously recorded resources. This was a high-level effort that entailed the identification of the location and distribution of previously recorded resources that would indicate areas highly sensitive for cultural resources. The records search was also conducted to determine the previous survey coverage for Moorpark. For built environment features, ECORP relied on records on file at the SCCIC to inform the locations of previously recorded built environment resources.

In addition to the official maps for archaeological sites and surveys on file at the SCCIC for Ventura County, ECORP also contacted the Moorpark Historical Society to gather relevant information on the city. ECORP archaeologists also reviewed historic US Geological Survey topographic maps and historical aerial photographs of the city. Historical aerial photos taken in 1947, 1969, and 1978 to present were also reviewed for indications of property usage and built environment.

Results of the records search indicated that 135 cultural resources studies were conducted within the city limits between 1967 and 2017. These reports include a mix of archaeological field studies, literature searches, testing and data recovery reports, management plans, monitoring reports, and architectural history evaluations. A review of these reports indicates that approximately 77 percent of the city has been covered by previous cultural resources studies.

The review also found that 52 previously recorded cultural resources were identified. Of those, 20 consist of precontact archaeological and/or ethnographic sites, including habitation sites, lithic scatters, hearths/pits, and bedrock milling features. Also, 31 previously recorded resources consist of historic-period archaeological sites and/or historic-period built environment resources. Historic-period archaeological resources consist of foundations, landscaping features, water conveyance systems, refuse deposits, walls/fences, structures, and roads/trails/railroads. Built environment resources include educational buildings, single family properties, one- to three-story commercial buildings, engineering structures, multiple family structures, industrial buildings, ancillary buildings, and a dam. The remaining resource consists of a multicomponent site with both historical archaeological and precontact archaeological deposits.

Cultural resources come in a variety of forms and range from historic, existing architecture to deeply buried archaeological and tribal cultural resources. The ability to predict the presence of cultural resources is not always possible; however, the use of modeling to produce sensitivity and compliance status maps can be very helpful in long-range planning efforts. The sensitivity model for the city was developed by professional archaeologists through a records search and literature review of Moorpark via CHRIS through the SCCIC. Results of the model for architectural and archaeological sensitivity are further discussed below. However, it is important to note that the categories presented in the model are expected to shift over time; thus, they are not definitive and should be considered only for screening. Due to the nature of the cultural resources under analysis, sensitivity classifications differ between the Archaeological Sensitivity Model and the Architectural History Sensitivity Model.

Historical Resources

Historic resources are buildings, structures, objects, sites, and districts of significance in history, archaeology, architecture, and culture. These resources include intact structures of any type that are at least 50 years old. They are sometimes called the built environment and include houses and structures such as irrigation works and engineering features. Historical resources are preserved because they provide a link to a region's past and a frame of reference for a community.

The Moorpark Historical Society lists the following nine Points of Interest within Moorpark (Moorpark Historical Society 2022):

- Original Moorpark Southern Pacific Depot Site at the southeast corner of High Street and Moorpark Avenue
- Moorpark Mercantile Location at the northeast corner of High Street and Walnut Avenue
- Moorpark Women's Fortnightly Clubhouse at 239 Charles Street
- Munger/Cornett Home at 64 Charles Street
- Tanner's Corner at the northwest corner of High Street and Moorpark Avenue
- Theater on High Street at 45 High Street
- Wesley Chapel at the northeast corner of Walnut Street and Charles Street

- Whitaker Block at the northwest corner of High Street and Bard Street
- William's Service Station at the northeast corner of High Street and Bard Street

A review of the Historical Landmarks of Ventura County by the Ventura County Genealogical Society listed the following two properties in Moorpark:

- The 1890 circa Moorpark First Southern Baptist Church at 705 Walnut Street
- The 1900s High Street Pepper Trees located on High Street planted by Poindexter

The Built Environment Resources Directory (BERD) lists 13 historic-period resources in Moorpark (OHP 2022). These include 5 bridges along SR-23 and 8 buildings/structures, including the Tanner Corner, the Saugus Santa Susana Moorpark Torrey Trans Tower, the National Ready Mix Concrete Company, and the Fence Factory. The 5 bridges are listed as not having been evaluated for the NRHP or CRHR, and 7 of the 8 buildings/structures are listed as having been determined ineligible for NRHP by consensus through the Section 106 process but have not been evaluated for cultural resources or Local Listing. Only the Tanner Corner is listed in the CRHR as an individual property. The NRHR did not reveal any listed properties in Moorpark (NPS 2022).

Figure 5.5-1, *Built Environment Sensitivity*, illustrates the sensitivity model for architectural history (built environment resources). The three categories depicted are described below.

High Sensitivity

This category represents the areas that have previously recorded historic buildings and structures that were documented by professionals on California Department of Parks and Recreation (DPR) 523 series forms and submitted to the SCCIC, usually as a result of cultural resources management studies for previous projects subject to state or federal law. These include the locations of known historic buildings and structures as well as the areas between them where there is a higher density of resources recorded.

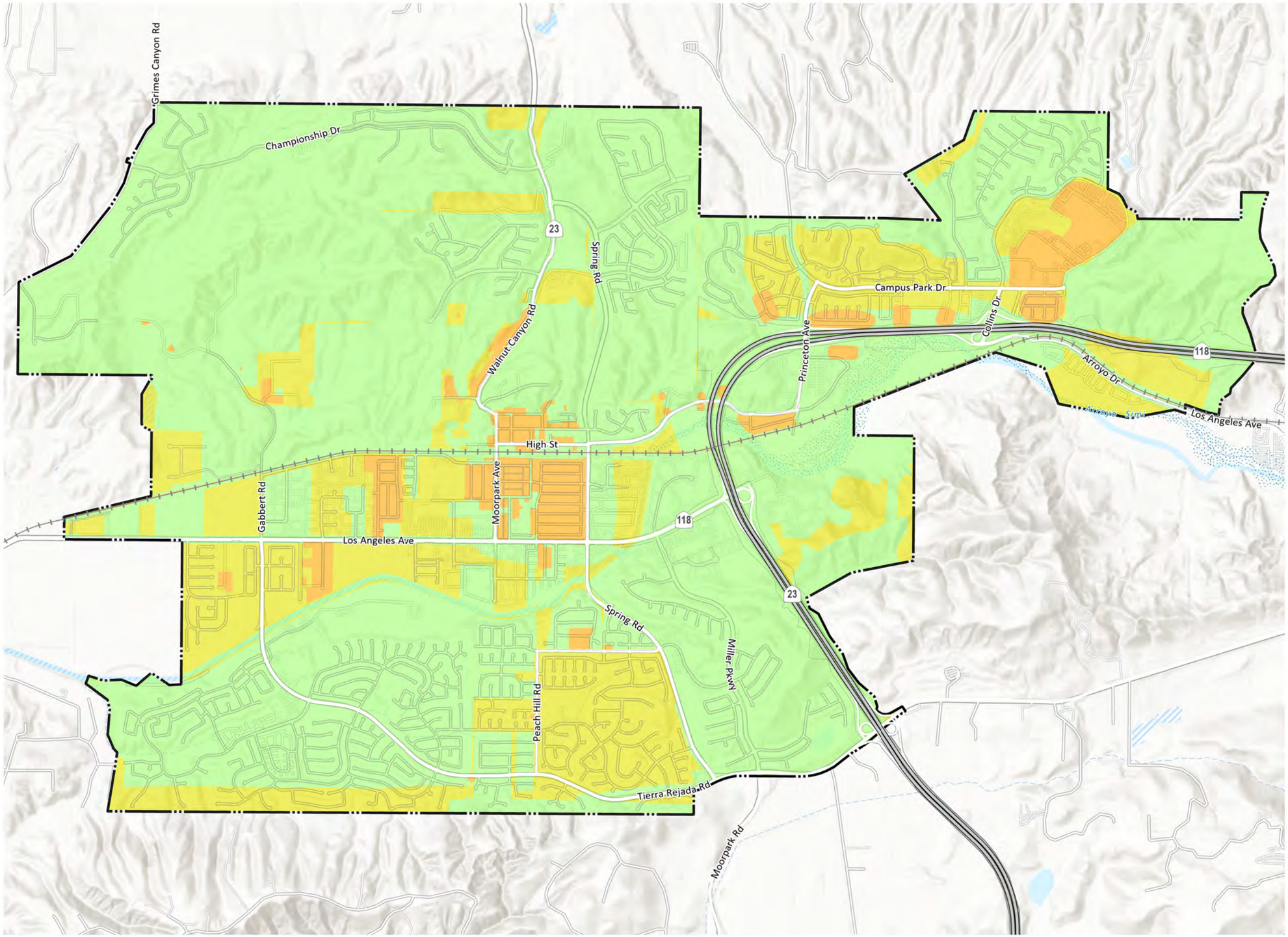
This model does not differentiate between previously recorded buildings that have since been removed, remodeled or impacted, and those that remain intact; however, projects that will occur in a known High Sensitivity area should expect a higher likelihood of encountering archaeological sites associated with previous historic structures, such as privies, cellars, foundations, and other subsurface features. For projects in known High Sensitivity areas that are seeking discretionary approval from the City, a field visit by a qualified professional architectural historian or cultural resources professional to verify integrity should be performed.

Assumed High Sensitivity

This category represents those areas that can be classified neither as known High nor Low, because they have not been surveyed for historic buildings and structures by professionals. This would include property such as private parcels that have never sought entitlements or approval from the City for projects subject to discretionary approval. They are assumed to be highly sensitive for built environment resources until they have been surveyed by professionals. Should future surveys result in a negative finding for historic buildings and structures, the subject property would be converted to either High or Low Sensitivity by City planning staff, in consultation with qualified professionals.

Figure 5.5-1

Built Environment Sensitivity



City Boundary

Railroad

Built Environment Sensitivity

High

Assumed High

Low

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0 1,000 2,000 4,000 FT

Source: PlaceWorks, 2022; ECorp, 2022 Date: 9/27/2022

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Low Sensitivity

This category represents areas that are reflected in the files at the SCCIC as having been previously surveyed by qualified professionals and for which no historic buildings or structures were observed or recorded. Property within this category is not expected to be constrained by cultural resources; however, associated archaeological deposits are not always visible from the surface. Standard conditions and mitigation measures for unanticipated discovery should be utilized as appropriate, given the nature of the project.

Archaeological Resources

Archaeological resources are the physical remains of past human activities and can be either prehistoric or historic. Archaeological sites contain significant evidence of human activity. Generally, a site is defined by a significant accumulation or presence of food remains, waste from the manufacturing of tools, tools, concentrations or alignments of stones, modification of rock surfaces, unusual discoloration or accumulation of soil, and/or human skeletal remains.

Figure 5.5-2, *Archaeological Sensitivity*, presents the sensitivity model for archaeological sites. The very nature of deeply buried archaeological resources makes identification and avoidance difficult, as some archaeological resource sites do not manifest on the surface and are not detectable by typical surface or near-surface methods alone. Confidential information in the possession of the City cannot be disclosed to the public. As a result, the sensitivity model does not include specific locations of archaeological sites but considers broader zones of sensitivity. The three categories depicted on Figure 5.5-2 are described below.

High Sensitivity

This category represents the broad zones that have previously yielded archaeological sites that have been recorded by professionals on DPR 523 series forms and submitted to the SCCIC, usually as a result of cultural resources management studies for previous projects subject to state or federal law. This model does not differentiate between previously recorded sites that have since been removed or impacted and those that remain intact; however, projects in a known High Sensitivity area should expect a higher likelihood of encountering archaeological sites. Projects in known High Sensitivity areas that are seeking discretionary approval from the City should have a field visit by a qualified professional archaeologist to verify integrity.

Assumed High Sensitivity

This category represents areas that can be classified as neither High nor Low because they have not been surveyed for archaeological sites by professionals. This would include property such as private parcels that have never sought entitlements or approval from the City for projects subject to discretionary approval. Until these areas have been surveyed by professionals, they are assumed to be highly sensitive for archaeological sites. Should a future survey result in a negative finding for archaeological sites, the subject property may be converted to either High or Low Sensitivity by City planning staff, in consultation with qualified professionals.

Low Sensitivity

This category represents areas that are reflected in the files at the SCCIC as having been previously surveyed by qualified professionals and for which no archaeological sites were observed or recorded. Property in this category is not expected to be constrained by cultural resources; however, archaeological sites are not always visible from the surface. Standard conditions and mitigation measures for unanticipated discovery should be utilized as appropriate, depending on the nature of the project.

A potential applicant for a project in the city can request information about whether that project is in a High, Assumed High, or Low Sensitivity area at any time. Though the City cannot release confidential information to the requesting party, knowledge of the relative sensitivity of the project location may help make a determination about whether development or conservation is the appropriate land use. The sensitivity model is also useful in suggesting the types of cultural resources that may be encountered, which in turn can be used to predefine research themes and topics. It can also be used to develop standard treatment methods when avoidance or mitigation of significant cultural resources is necessary.

5.5.2 Thresholds of Significance

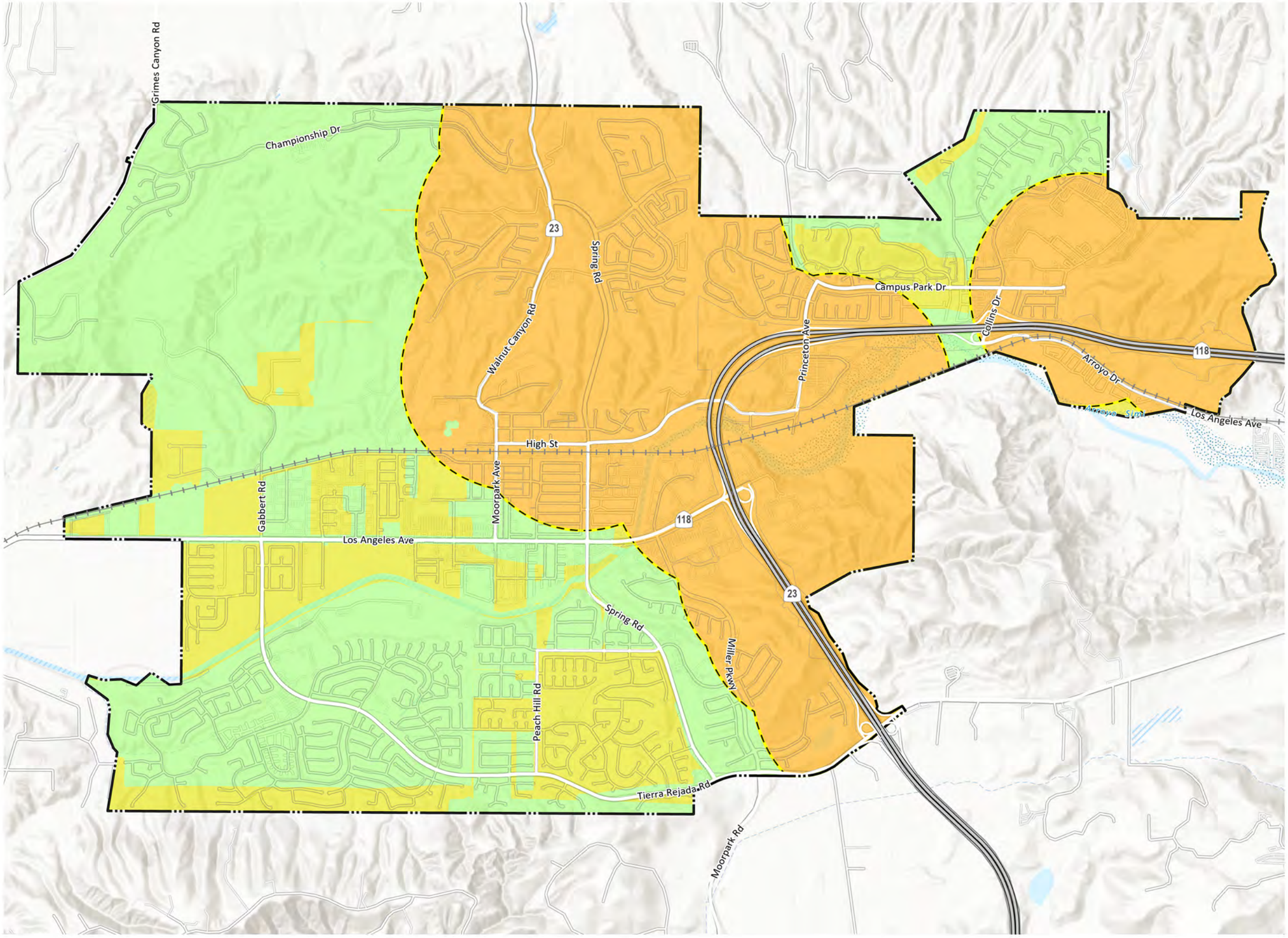
CEQA Guidelines Section 15064.5 provides direction on determining significance of impacts to archaeological and historical resources. Generally, a resource shall be considered "historically significant" if the resource meets the criteria for listing on the California Register of Historical Resources:

- Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;
- Is associated the with lives of persons important in our past;
- Embodies the distinctive characteristics of a type, period, region or method of construction, or represents the work of an important creative individual, or possesses high artistic values; or
- Has yielded, or may be likely to yield, information important in prehistory or history. (PRC Section 5024.1; 14 CCR Section 4852)

The fact that a resource is not listed in the California Register of Historical Resources, not determined to be eligible for listing, or not included in a local register of historical resources does not preclude a lead agency from determining that it may be a historical resource.

Figure 5.5-2

Archaeological Sensitivity



City Boundary
Railroad
High Sensitivity Archaeological Site Buffer

Archaeological Sensitivity

High
Assumed High
Low

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Source: PlaceWorks, 2022; ECorp, 2022 Date: 9/27/2022

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According to Appendix G of the CEQA Guidelines, a project would normally have a significant effect on the environment if the project would:

C-1 Cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5.

C-2 Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5.

C-3 Disturb any human remains, including those interred outside of dedicated cemeteries.

5.5.3 Environmental Impacts

The applicable thresholds are identified in brackets after the impact statement.

Impact 5.5-1: Buildout of the City of Moorpark General Plan 2050 could impact an identified historic resource. [Threshold C-1]

There are 13 previously recorded built environment resources identified within the City of Moorpark, of which five are listed as not having been evaluated for the NRHP or CRHR, seven are determined to be ineligible for NRHP, and one listed in the CRHR as an individual property. There are no resources within the city limits listed on the NRHP. Within the city, there are no State Historic Landmarks or State Historical Points of Interest, but there are nine local Points of Interests designated by the Moorpark Historical Society and two properties listed as a Historical Landmark of Ventura County by the Ventura County Genealogical Society. Figure 5.5-1 depicts the sensitivity of built environments within Moorpark. Development in accordance with the proposed project could adversely impact any of these historic resources.

Known or future historic sites or resources listed in the national, California, or local registers maintained by the city would be protected through local ordinances, the Moorpark General Plan 2050 policies, and state and federal regulations restricting alteration, relocation, and demolition of historical resources. Compliance with the proposed Moorpark General Plan 2050 policies and state and federal regulations would ensure that development would not result in adverse impacts to identified historic and cultural resources.

The Conservation, Housing, and Land Use Elements of the Moorpark General Plan 2050 have policies that specifically address sensitive known and potential historic resources and their protection.

Conservation Element

- **Policy COS-3.1 Historic resources inventory.** Maintain and periodically update an inventory of recognized historic buildings, structures, districts, and landscapes of local, regional, or national significance and those that might be eligible for recognition.

- **Policy COS-3.2 Historic resource protection and use.** Ensure the protection, rehabilitation, and reuse of historic buildings, structures, districts, and landscapes of local, regional, or national significance.

- **Policy COS-3.3 Downtown historic resources.** Protect Moorpark's traditional downtown area so that physical changes that occur within it enhance its historic character.
- **Policy COS-3.4 Historic resources awareness.** Promote community awareness of the benefits of historic preservation and provide resources such as how-to guides and funding that supports community actions to preserve historic resources.

Housing Element

- **Policy HE-1.5 Historic Preservation.** Support the designation, preservation, and maintenance of historically and/or architecturally significant buildings.

Land Use Element

- **Policy LU-5.6 Historic resources.** Collaborate with the County of Ventura Cultural Heritage Board and Moorpark Historical Society to identify, inventory, and preserve Moorpark's historical resources.
- **Policy LU-19.8 Historic buildings.** Preserve where possible historic structures and ensure that where new development occurs, it complements the physical qualities and distinct features of existing historic resources.

At the time a development project is proposed adjacent to or near a known or potential historic structure or resource, the project-level CEQA document of the development project would need to identify any impacts, direct or indirect, that the project could have on the identified historic structure or resource. The CEQA Guidelines require a project that will have potentially adverse impacts on historical resources to conform to the Secretary of the Interior's Standards for the Treatment of Historic Properties.

It is also important to note that the Moorpark General Plan 2050 is a regulatory document that sets the framework for future growth and development of the city and does not directly result in development. Before any development or redevelopment activities, all such activities are required to be analyzed for conformance with the General Plan, zoning requirements, and other applicable local and state requirements; comply with the requirements of CEQA; and obtain all necessary clearances and permits. Thus, adoption of the Moorpark General Plan 2050 in itself would not lead to demolition or material alteration of any of these historic resources.

However, identified historic structures and sites that are potentially eligible for future historic resources listing may be vulnerable to development activities accompanying infill, redevelopment, or revitalization that would be accommodated by the Moorpark General Plan 2050. For instance, the placement of new buildings adjacent to a historic resource may result in indirect impacts to access, visibility, and visual context, and renovations or modifications to historic resources may deteriorate or destroy the characteristics that make those resources important or unique. In addition, other buildings or structures that could meet the NRHP criteria upon reaching 50 years of age might be impacted by development or redevelopment activity that would be accommodated by the Moorpark General Plan 2050. Consequently, impacts to historic resources are considered potentially significant.

Level of Significance Before Mitigation: Potentially significant.

Impact 5.5-2: Future development in the city that would be accommodated by the Moorpark General Plan 2050 could impact known and unknown archaeological resources. [Threshold C-2]

Adoption of the Moorpark General Plan 2050 in itself would not directly affect archaeological resources. Long-term implementation of the Moorpark General Plan 2050 land use plan could allow development (e.g., new development, infill development, redevelopment, and revitalization/restoration), including grading, of known and unknown sensitive areas. Grading and construction activities of undeveloped areas or redevelopment that requires more intensive soil excavation than in the past could potentially cause the disturbance of archeological resources. Therefore, future development that would be accommodated by the Moorpark General Plan 2050 could potentially unearth previously unrecorded resources.

There are 52 cultural resources within the city—20 precontact archaeological and/or ethnographic sites, 31 historic-period archaeological sites and/or historic-period built environment resources, and 1 multicomponent resource with both historical and precontact archaeological deposits. Figure 5.5-2 depicts the sensitivity of archaeological resources in Moorpark.

Archaeological sites are protected by a wide variety of state policies and regulations enumerated under the PRC. Cultural resources are also recognized as nonrenewable and therefore receive protection under the PRC and CEQA. Review and protection of archaeological resources are also afforded by CEQA for individual development projects that would be accommodated by the Moorpark General Plan 2050, subject to discretionary actions that are implemented in accordance with the land use plan of the Moorpark General Plan 2050. Per PRC Section 21083.2 of CEQA, the lead agency is required to determine whether a development project may have a significant effect on archaeological resources. If the lead agency determines that the project may have a significant effect on unique archaeological resources, the project-level CEQA document being prepared for the development project is required to address the issue of those resources.

Under the Conservation Element of the Moorpark General Plan 2050, the City would also implement the following policy to reduce impacts of potential development on archeological resources.

- **Policy COS-3.5 Paleontological and archaeological resources.** Require new development to protect and preserve paleontological and archaeological resources from destruction, and avoid and minimize impacts to such resources in accordance with the requirements of CEQA.

It is also important to note that the Moorpark General Plan 2050 is a regulatory document that sets the framework for future growth and development in the city and does not result in development in and of itself. Before any development or redevelopment activities, those activities must be analyzed for conformance with the General Plan, zoning requirements, and other applicable local and state requirements; comply with the requirements of CEQA; and obtain all necessary clearances and permits.

Long-term implementation of the Moorpark General Plan 2050 could allow development (e.g., infill development, redevelopment, and revitalization/restoration), including grading, of unknown sensitive areas. Grading and construction activities of undeveloped areas or redevelopment that requires more intensive soil

excavation than in the past could potentially cause the disturbance of archaeological resources. Therefore, future development could potentially unearth previously unknown/unrecorded archaeological resources, and impacts could be potentially significant.

Level of Significance Before Mitigation: Potentially significant.

Impact 5.5-3: Grading activities could potentially disturb human remains. [Threshold C-3]

The Moorpark General Plan 2050 in itself does not involve grading activities and would not directly disturb any human remains. However, long-term implementation of the Moorpark Genera Plan 2050 would allow development and redevelopment, including grading, of sensitive areas, possibly disturbing human remains, including those outside of formal cemeteries.

California Health and Safety Code Section 7050.5; CEQA Section 15064.5; and PRC Section 5097.98 mandate the process to be followed in the event of an accidental discovery of any human remains in a location other than a dedicated cemetery. Specifically, California Health and Safety Code, Section 7050.5, requires that if human remains are discovered on a project site, disturbance of the site shall remain halted until the coroner has conducted an investigation into the circumstances, manner, and cause of any death, and the recommendations concerning the treatment and disposition of the human remains have been made to the person responsible for the excavation, or to his or her authorized representative, in the manner provided in Section 5097.98 of the PRC. If the coroner determines that the remains are not subject to his or her authority, and if the coroner has reason to believe that the human remains are those of a Native American, he or she shall contact, by telephone within 24 hours, the Native American Heritage Commission. Although soil-disturbing activities associated with development in accordance with the Moorpark General Plan 2050 could result in the discovery of human remains, compliance with existing law would ensure that significant impacts to human remains would not occur.

Level of Significance Before Mitigation: Less than significant.

5.5.4 Relevant General Plan Policies

Conservation Element

- **Policy COS-3.1 Historic resources inventory.** Maintain and periodically update an inventory of recognized historic buildings, structures, districts, and landscapes of local, regional, or national significance and those that might be eligible for recognition.
- **Policy COS-3.2 Historic resource protection and use.** Ensure the protection, rehabilitation, and reuse of historic buildings, structures, districts, and landscapes of local, regional, or national significance.
- **Policy COS-3.3 Downtown historic resources.** Protect Moorpark's traditional downtown area so that physical changes that occur within it enhance its historic character.

- **Policy COS-3.4 Historic resources awareness.** Promote community awareness of the benefits of historic preservation and provide resources such as how-to guides and funding that supports community actions to preserve historic resources.

- **Policy COS-3.5 Paleontological and archaeological resources.** Require new development to protect and preserve paleontological and archaeological resources from destruction, and avoid and minimize impacts to such resources in accordance with the requirements of CEQA.

Housing Element

- **Policy HE-1.5 Historic Preservation.** Support the designation, preservation, and maintenance of historically and/or architecturally significant buildings.

Land Use Element

- **Policy LU-5.6 Historic resources.** Collaborate with the County of Ventura Cultural Heritage Board and Moorpark Historical Society to identify, inventory, and preserve Moorpark's historical resources.

- **Policy LU-19.8 Historic buildings.** Preserve where possible historic structures and ensure that where new development occurs, it complements the physical qualities and distinct features of existing historic resources.

5.5.5 Level of Significance Before Mitigation

Upon implementation of regulatory requirements and standard conditions of approval, some impacts would be less than significant: 5.5-3.

Without mitigation, these impacts would be **potentially significant**:

- **Impact 5.5-1** Implementation of the Moorpark General Plan 2050 could impact historical resources.

- **Impact 5.5-2** Implementation of the Moorpark General Plan 2050 could impact archaeological resources.

5.5.6 Mitigation Measures

Impact 5.5-1

CUL-1 **Historical Resources Assessment.** Prior to any construction activities that may affect historical resources (i.e., structures 45 years or older), a historical resources assessment shall be performed by an architectural historian or a historian who meets the Secretary of the Interior's Professionally Qualified Standards in architectural history or history. The assessment shall include a records search to determine if any resources that may be potentially affected by the project have been previously recorded, evaluated, and/or

designated in the National Register of Historic Places, California Register of Historic Resources, or local register of historic resources. Following the records search, the qualified historian or architectural historian shall conduct a reconnaissance-level and/or intensive-level survey in accordance with the California Office of Historic Preservation guidelines to identify any previously unrecorded potential historical resources that may be potentially affected by the proposed project. Pursuant to the definition of a historical resource under CEQA, potential historical resources shall be evaluated under a developed historic context.

CUL-2 **Historical Resources Standards.** To ensure that projects requiring the relocation, rehabilitation, or alteration of a historical resource do not impair its significance, the *Secretary of the Interior's Standards for the Treatment of Historic Properties* shall be used to the maximum extent possible. The application of the standards shall be overseen by a qualified architectural historian or historic architect meeting the Secretary of the Interior's Professionally Qualified Standards. Prior to any construction activities that may affect the historical resource, a report identifying and specifying the treatment of character-defining features and construction activities shall be provided to the City of Moorpark.

CUL-3 **Historical Resources Documentation.** If a proposed project would result in the demolition or significant alteration of a historical resource, it cannot be mitigated to a less than significant level. However, recordation of the resource prior to construction activities will assist in reducing adverse impacts to the greatest extent possible. Recordation shall take the form of Historic American Buildings Survey (HABS), Historic American Engineering Record (HAER), or Historic American Landscape Survey (HALS) documentation and shall be performed by an architectural historian or historian who meets the Secretary of the Interior's Professionally Qualified Standards. Documentation shall include an architectural and historical narrative; medium- or large-format black and white photographs, negatives, and prints; and supplementary information such as building plans and elevations and/or historic photographs. Documentation shall be reproduced on archival paper and placed in appropriate local, state, or federal institutions. The specific scope and details of documentation would be developed at the project level.

CUL-4 **Eligible Cultural Resources Measures.** If cultural resources that are eligible for listing in the National Register of Historic Places, California Register of Historic Resources, or local register of historic resources are identified within or adjacent to the proposed development, the construction limits shall be clearly flagged to ensure impacts to eligible cultural resources are avoided or minimized to the extent feasible. Prior to implementing construction activities, a qualified archaeologist shall verify that the flagging clearly delineates the construction limits and eligible resources to be avoided. Since the location of some eligible cultural resources is confidential, these resources will be flagged as environmentally sensitive areas.

Impact 5.5-2

CUL-5 **High and Assumed-High Sensitivity.** To determine the archaeological sensitivity for discretionary projects in areas designated "high" and "assumed-high" sensitivity for archeological resources, an archaeological resources assessments shall be performed under the supervision of an archaeologist that meets the Secretary of the Interior's Professionally Qualified Standards (PQS) in either prehistoric or historic archaeology. The assessments shall include records searches of the California Historical Resources Information System and the Sacred Lands File maintained by the Native American Heritage Commission. The records searches shall determine if the proposed project has been previously surveyed for archaeological resources, identify and characterize the results of previous cultural resource surveys, and disclose any cultural resources that have been recorded and/or evaluated. A Phase I pedestrian survey shall be undertaken in areas that are undeveloped to locate any surface cultural materials.

a. If potentially significant archaeological resources are identified through an archaeological resources assessment, and impacts to these resources cannot be avoided, a Phase II Testing and Evaluation investigation to determine significance shall be performed by an archaeologist who meets the PQS prior to any construction-related ground-disturbing activities. If resources are determined significant or unique through Phase II testing and site avoidance is not possible, appropriate site-specific mitigation measures shall be established and undertaken. These might include a Phase III data recovery program that would be implemented by a qualified archaeologist and performed in accordance with the Office of Historic Preservation's *Archaeological Resource Management Reports (ARMR): Recommended Contents and Format* (1990) and *Guidelines for Archaeological Research Designs* (1991).

b. If the archaeological assessment did not identify potentially significant archaeological resources within the proposed General Plan area but indicated the area to be highly sensitive for archaeological resources, a qualified archaeologist shall monitor all ground-disturbing construction and pre-construction activities in areas with previously undisturbed soil. The archaeologist shall inform all construction personnel, prior to construction activities, of the proper procedures in the event of an archaeological discovery. The training shall be held in conjunction with the project's initial on-site safety meeting and shall explain the importance and legal basis for the protection of significant archaeological resources. In the event that archaeological resources (artifacts or features) are exposed during ground-disturbing activities, construction activities in the immediate vicinity of the discovery shall be halted while the resources are evaluated for significance by an archaeologist who meets the PQS. If the discovery proves to be significant, it shall be curated with a recognized scientific or educational repository.

c. If the archaeological assessment did not identify potentially significant archaeological resources, but indicates the area to be of medium sensitivity for archaeological

resources, an archaeologist who meets the PQS shall be retained on an on-call basis. The archaeologist shall inform all construction personnel prior to construction activities about the proper procedures in the event of an archaeological discovery. The training shall be held in conjunction with the project's initial on-site safety meeting, and shall explain the importance and legal basis for the protection of significant archaeological resources. In the event that archaeological resources (artifacts or features) are exposed during ground-disturbing activities, construction activities in the immediate vicinity of the discovery shall be halted while the on-call archaeologist is contacted. If the discovery proves to be significant, it shall be curated with a recognized scientific or educational repository.

CUL-6 **Low-Sensitivity.** To determine the archaeological sensitivity for discretionary projects in areas designated "low" sensitivity for archeological resources, the project applicant shall retain an archaeologist that meets the Secretary of the Interior's Professionally Qualified Standards (PQS) in either prehistoric or historic archaeology to conduct a records search. The assessments shall include records searches of California Historical Resources Information System and the Sacred Lands File maintained by the Native American Heritage Commission. If the records search identifies a medium sensitivity for archaeological resources, an archaeologist who meets the PQS shall be retained on an on-call basis. The archaeologist shall inform all construction personnel prior to construction activities about the proper procedures in the event of an archaeological discovery. The training shall be held in conjunction with the project's initial on-site safety meeting and shall explain the importance and legal basis for the protection of significant archaeological resources. In the event that archaeological resources (artifacts or features) are exposed during ground-disturbing activities, construction activities in the immediate vicinity of the discovery shall be halted while the on-call archaeologist is contacted. If the discovery proves to be significant, it shall be curated with a recognized scientific or educational repository.

5.5.7 Level of Significance After Mitigation

Impact 5.5-1

Policies in the Moorpark General Plan 2050 as well as Mitigation Measures CUL-1 through CUL-4 would reduce potential impacts associated with historic resources. However, if a proposed project would result in the demolition or significant alteration of a historical resource, it cannot be mitigated to a less than significant level. As a result, impacts on historic resources as a result of future development in accordance with the proposed Moorpark General Plan 2050 are ***significant and unavoidable***.

Impact 5.5-2

Policies the incorporated into the Moorpark General Plan 2050 and Mitigation Measure CUL-5 would require specific measures to identify, protect, and preserve cultural resources such as conducting site-specific archeological resources studies, monitoring earth-disturbing activities, and evaluating and recovering cultural resources found during construction activities. Mitigation Measures CUL-5 and CUL-6 would reduce

potential impacts associated with archaeological resources to a level that is less than significant by avoiding or recovering the archaeological resource(s). Therefore, no significant adverse impacts relating to archaeological resources have been identified.

5.5.8 References

ECORP Consulting. 2020a, September. Cultural Resources Technical Report: Existing Conditions.

———. 2020b, October 15. Cultural Resources Sensitivity Model for the Moorpark General Plan Update, City of Moorpark, Ventura County.

Moorpark Historical Society. 2022, September 2 (accessed). Points of Historical Interest. http://moorparkhistoricalsociety.org/points-of-historical-interest/.

National Park Service (NPS). 2022, September 2 (accessed). National Register of Historic Places. https://www.nps.gov/subjects/nationalregister/database-research.htm.

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5.6 ENERGY

This section of the Draft Environmental Impact Report (EIR) evaluates the energy implications of the City of Moorpark General Plan 2050 (proposed project) in a local and regional context. The analysis in this section is based on the existing electricity and natural gas uses in the City of Moorpark provided by reports from Southern California Edison (SCE), Southern California Gas Company (SoCalGas), and the Clean Power Alliance (CPA) (Appendix D). In addition, this section qualitatively analyzes transportation energy by evaluating daily vehicle miles traveled (VMT) from the data provided by Iteris (Appendix K).

5.6.1 Environmental Setting

Federal, state, and local laws, regulations, plans, or guidelines related to energy that are potentially applicable to the proposed project are summarized herein.

5.6.1.1 REGULATORY BACKGROUND

Federal

Federal Energy Policy and Conservation Act

The Energy Policy and Conservation Act of 1975 was established in response to the 1973 oil crisis. The act created the Strategic Petroleum Reserve, established vehicle fuel economy standards, and prohibited the export of U.S. crude oil (with a few limited exceptions). It also created Corporate Average Fuel Economy (CAFE) standards for passenger cars starting in model year 1978. The CAFE Standards are updated periodically to account for changes in vehicle technologies, driver behavior, and/or driving conditions.

On August 5, 2021, the National Highway Traffic Safety Administration announced new proposed fuel standards in response to Executive Order (EO) 13990. Fuel efficiency under the standards proposed would increase 8 percent annually for model years 2024 to 2026 and increase estimate fleetwide average by 12 mpg for model year 2026 relative to model year 2021 (NHTSA 2021).

Energy Independence and Security Act of 2007

The Energy Independence and Security Act of 2007 (Public Law 110-140) seeks to provide the nation with greater energy independence and security by increasing the production of clean renewable fuels; improving vehicle fuel economy; and increasing the efficiency of products, buildings, and vehicles. It also seeks to improve the energy performance of the federal government. The act sets increased corporate average fuel economy standards; the renewable fuel standard; appliance energy-efficiency standards; building energy-efficiency standards; and accelerated research and development tasks on renewable energy sources (e.g., solar energy, geothermal energy, and marine and hydrokinetic renewable energy technologies), carbon capture, and sequestration (USEPA 2022).

Energy Policy Act of 2005

Passed by Congress in July 2005, the Energy Policy Act includes a comprehensive set of provisions to address energy issues. This Act includes tax incentives for energy conservation improvements in commercial and residential buildings, fossil fuel production and clean coal facilities, and construction and operation of nuclear power plants, among other things. Subsidies are also included for geothermal, wind energy, and other alternative energy producers.

National Energy Policy

Established in 2001 by the National Energy Policy Development Group, the National Energy Policy is designed to help the private sector and state and local governments promote dependable, affordable, and environmentally sound production and distribution of energy for the future. Key issues addressed by the energy policy are energy conservation, repair and expansion of energy infrastructure, and ways of increasing energy supplies while protecting the environment.

Natural Gas Pipeline Safety Act of 1968

The Natural Gas Pipeline Safety Act of 1968 authorizes the United States Department of Transportation to regulate pipeline transportation of flammable, toxic, or corrosive natural gas and other gases as well as the transportation and storage of liquefied natural gas. The Pipeline and Hazardous Materials Safety Administration within the Department of Transportation develops and enforces regulations for the safe, reliable, and environmentally sound operation of the nation's 2.6-million-mile pipeline transportation system.

State

Warren-Alquist Act

Established in 1974, the Warren-Alquist Act created the California Energy Commission (CEC) in response to the energy crisis of the early 1970s and the state's unsustainable growing demand for energy resources. The CEC's core responsibilities include advancing State energy policy, encouraging energy efficiency, certifying thermal power plants, investing in energy innovation, developing renewable energy, transforming transportation, and preparing for energy emergencies. The Warren-Alquist Act is updated annually to address current energy needs and issues, and its latest edition was in January 2022.

California Public Utilities Commission

In September 2008, the California Public Utilities Commission (CPUC) adopted the Long-Term Energy Efficiency Strategic Plan, which provides a framework for energy efficiency in California through the year 2020 and beyond. It articulates a long-term vision and goals for each economic sector, identifying specific near-term, mid-term, and long-term strategies to assist in achieving these goals. This plan sets forth the following four goals, known as Big Bold Energy Efficiency Strategies, to achieve significant reductions in energy demand:

- All new residential construction in California will be zero net energy (ZNE) by 2020.[1]
- All new commercial construction in California will be ZNE by 2030.
- Heating, ventilation and air conditioning commonly referred to as "HVAC" will be transformed to ensure that its energy performance is optimal for California's climate.
- All eligible low-income customers will be given the opportunity to participate in the low-income energy efficiency program by 2020.

With respect to the commercial sector, the Long-Term Energy Efficiency Strategic Plan notes that commercial buildings, which include schools, hospitals, and public buildings, consume more electricity than any other end-use sector in California. The commercial sector's five-billion-plus square feet of space accounts for 38 percent of the state's power use and over 25 percent of natural gas consumption. Lighting, cooling, refrigeration, and ventilation account for 75 percent of all commercial electric use, and space heating, water heating, and cooking account for over 90 percent of gas use. In 2006, schools and colleges were in the top five facility types for electricity and gas consumption, accounting for approximately 10 percent of state's electricity and gas use.

The CPUC and CEC have adopted the following goals to achieve ZNE levels by 2030 in the commercial sector:

- **Goal 1:** New construction will increasingly embrace ZNE performance (including clean, distributed generation), reaching 100 percent penetration of new starts in 2030.
- **Goal 2:** 50 percent of existing buildings will be retrofit to ZNE by 2030 through achievement of deep levels of energy efficiency and with the addition of clean distributed generation.
- **Goal 3:** Transform the commercial lighting market through technological advancement and innovative utility initiatives.

Renewables Portfolio Standard

Senate Bills 1078, 107, and X1-2 and EO S-14-08

The California Renewables Portfolio Standard (RPS) was established in 2002 under SB 1078 and was amended in 2006, 2011, and 2018. The RPS program requires investor-owned utilities, electric service providers, and community choice aggregators to increase the use of eligible renewable energy resources to 33 percent of total procurement by 2020. Initially under the RPS, certain retail sellers of electricity were required to increase the amount of renewable energy each year by at least 1 percent in order to reach at least 20 percent by December 30, 2010. EO S-14-08 was signed in November 2008, which expanded the state's Renewable Energy Standard to 33 percent renewable power by 2020. This standard was adopted by the California legislature in 2011 (SB X1-2). The California Public Utilities Commission is required to provide

[1] Zero net energy buildings are buildings that the total amount of energy used by the building on an annual basis is equal to or less than the amount of renewable energy created on the site.

quarterly progress reports on progress toward RPS goals. This has accelerated the development of renewable energy projects throughout the state. For year 2020, the three largest retail energy utilities each provided an average of 43 percent of its supplies from renewable energy sources. Community choice aggregators provided an average of 41 percent of their supplies from renewable sources (CPUC 2021).

Senate Bill 350

Governor Jerry Brown signed SB 350 on October 7, 2015, which expands the RPS by establishing a goal of 50 percent of the total electricity sold to retail customers in California per year by December 31, 2030. In addition, SB 350 includes the goal to double the energy efficiency savings in electricity and natural gas final end uses (such as heating, cooling, lighting, or class of energy uses upon which an energy efficiency program is focused) of retail customers through energy conservation and efficiency. The bill also requires the CPUC, in consultation with the CEC, to establish efficiency targets for electrical and gas corporations consistent with this goal. SB 350 also provides for the transformation of the California Independent System Operator into a regional organization to promote the development of regional electricity transmission markets in the western states and to improve the access of consumers served by the California Independent System Operator to those markets, pursuant to a specified process.

Senate Bill 100

On September 10, 2018, Governor Brown signed SB 100, which replaces the SB 350 requirements. Under SB 100, the RPS for public owned facilities and retail sellers consist of 44 percent renewable energy by 2024, 52 percent by 2027, and 60 percent by 2030. Additionally, SB 100 established a new RPS requirement of 50 percent by 2026. Furthermore, the bill also establishes an overall State policy that eligible renewable energy resources and zero-carbon resources supply 100 percent of all retail sales of electricity to California end-use customers and 100 percent of electricity procured to serve all State agencies by December 31, 2045. Under the bill, the State cannot increase carbon emissions elsewhere in the western grid or allow resource shuffling to achieve the 100 percent carbon-free electricity target.

Senate Bill 1020

SB 1020 was signed into law on September 16, 2022. SB 1020 provides interim RPS targets (90 percent renewable energy by 2035 and 95 percent renewable energy by 2040) and requires renewable energy and zero-carbon resources to reach 100 percent clean electricity by 2045.

AB 117 and SB 790

Community Choice Aggregation is a program that allows cities, counties, and other qualifying governmental entities within the service areas of investor-owned utilities to purchase and/or generate electricity for their residents and businesses. This program was made possible in California by passage of AB 117 (Migden, 2002) and SB 790 (Leno, 2011). AB 117 established Community Choice, and SB 790 strengthened it by creating a "code of conduct" that the incumbent utilities must adhere to in their activities relative to Community Choice.

Appliance Efficiency Regulations

California's Appliance Efficiency Regulations (Cal. Code Regs. Title 20, Parts 1600–1608) contain energy performance, energy design, water performance, and water design standards for appliances that are sold or offered for sale in California (including refrigerators, ice makers, vending machines, freezers, water heaters, fans, boilers, washing machines, dryers, air conditioners, pool equipment, and plumbing fittings). These standards are updated regularly to allow consideration of new energy efficiency technologies and methods (CEC 2017).

Title 24, Part 6, Energy Efficiency Standards

Energy conservation standards for new residential and nonresidential buildings were adopted by the California Energy Resources Conservation and Development Commission (now the CEC) in June 1977 and most recently revised in 2019 (Cal. Code Regs. Title 24, Part 6). Title 24 requires the design of building shells and building components to conserve energy. The standards are updated periodically to allow for consideration and possible incorporation of new energy efficiency technologies and methods.

The 2019 Building Energy Efficiency Standards, which were adopted on May 9, 2018, went into effect starting January 1, 2020. The 2019 standards move toward cutting energy use in new homes by more than 50 percent and require installation of solar photovoltaic systems for single-family homes and multifamily buildings of three stories and less (CBSC 2019a). The 2019 standards focus on four key areas: 1) smart residential photovoltaic systems; 2) updated thermal envelope standards (preventing heat transfer from the interior to exterior and vice versa); 3) residential and nonresidential ventilation requirements; and 4) nonresidential lighting requirements (CEC 2018). Under the 2019 standards, nonresidential buildings are generally 30 percent more energy efficient compared to the 2016 standards, and single-family homes are generally 7 percent more energy efficient (CEC 2021). When accounting for the electricity generated by the solar photovoltaic system, single-family homes would use 53 percent less energy compared to homes built to the 2016 standards (CEC 2021).

Furthermore, on August 11, 2021, the CEC adopted the 2022 Energy Code, which was approved by the California Building Standards Commission in December 2021. The 2022 Energy Code includes the 2022 Building Energy Efficiency Standards, which become effective and replace the existing 2019 standards on January 1, 2023. The 2022 standards require mixed-fuel single-family homes to be electric-ready to accommodate replacement of gas appliances with electric appliances. In addition, the new standards also include prescriptive photovoltaic system and battery requirements for high-rise, multifamily buildings (i.e., more than three stories), and noncommercial buildings such as hotels, offices, medical offices, restaurants, retail stores, schools, warehouses, theaters, and convention centers (CEC 2021).

Title 24, Part 11, Green Building Standards

On July 17, 2008, the California Building Standards Commission adopted the nation's first green building standards. The California Green Building Standards Code (CALGreen) was adopted as part of the California Building Standards Code. It includes mandatory requirements for new residential and nonresidential buildings throughout California. CALGreen is intended to (1) reduce GHG emissions from buildings; (2) promote

environmentally responsible, cost-effective, healthier places to live and work; (3) reduce energy and water consumption; and (4) respond to the directives by the governor. The mandatory provisions of CALGreen became effective January 1, 2011. The 2019 CALGreen update became effective on January 1, 2020. In addition, the 2022 CALGreen update, which was approved as part of 2022 Energy Code and becomes effective on January 1, 2023, provides updates to the residential and nonresidential voluntary measures.

Overall, the code is established to reduce construction waste, make buildings more efficient in the use of materials and energy, and reduce environmental impacts during and after construction. CALGreen has requirements for construction site selection, stormwater control during construction, construction waste reduction, indoor water use reduction, material selection, natural resource conservation, site irrigation conservation, and more. The code provides for design options allowing the designer to determine how best to achieve compliance for a given site or building condition. The code also requires building commissioning, which is a process for verifying that all building systems (e.g., heating and cooling equipment and lighting systems) are functioning at their maximum efficiency (CBSC 2019b).

Assembly Bill 1493

California vehicle GHG emission standards were enacted under AB 1493 (Pavley I). Pavley I is a clean-car standard that reduced GHG emissions from new passenger vehicles (light-duty auto to medium-duty vehicles) from 2009 through 2016 and was anticipated to reduce GHG emissions from new passenger vehicles by 30 percent in 2016. California implements the Pavley I standards through a waiver granted to California by the US Environmental Protection Agency (EPA). In 2012, the EPA issued a Final Rulemaking that sets even more stringent fuel economy and GHG emissions standards for model years 2017 through 2025 light-duty vehicles (see also the discussion on the update to the CAFE standards under *Federal*, above). In January 2012, the California Air Resources Board (CARB) approved the Pavley Advanced Clean Cars program (formerly known as Pavley II) for model years 2017 through 2025. The program combines the control of smog, soot, and global warming gases and requirements for greater numbers of zero-emission vehicles into a single package of standards. Under California's Advanced Clean Car program, by 2025, new automobiles will emit 34 percent fewer global warming gases and 75 percent fewer smog-forming emissions (CARB 2017). In August 2022, CARB approved the new Advanced Clean Cars II standards that will ensure all new passenger cars, trucks, and SUVs sold in the state will be zero-emitting by 2035 (CARB 2022). The Advanced Clean Cars II standards will amend the Zero-Emission Vehicle Regulation to require an increase in zero-emission vehicles and amends the Low-Emission Vehicle Regulations to include more stringent standards for gasoline cars and heavier passenger trucks to continue to reduce smog-forming emissions.

Executive Order N-79-20

On September 23, 2020, EO N-79-20 was issued, which sets a time frame for the transition to zero-emissions (ZE) passenger vehicles and trucks in addition to off-road equipment. It directs CARB to develop and propose the following:

- Passenger vehicle and truck regulations requiring increasing volumes of new ZEVs (zero-emission vehicles) sold in the California toward the target of 100 percent of in-state sales by 2035.

- Medium- and heavy-duty vehicle regulations requiring increasing volumes of new ZE trucks and buses sold and operated in California toward the target of 100 percent of the fleet transitioning to ZEVs by 2045 everywhere feasible, and for all drayage trucks to be ZE by 2035.

Strategies to achieve 100 percent zero emissions from all off-road vehicles and equipment operations in California by 2035, in cooperation with other State agencies, the EPA, and local air districts.

Local

Moorpark Municipal Code

Chapter 15.10, Title 15 of the Moorpark Municipal Code, California Green Building Standards Code adopted, incorporates the California Green Building Standards Code by reference.

5.6.1.2 EXISTING CONDITIONS EXISTING CONDITIONS

Electricity

Electricity is quantified using kilowatts (kW) and kilowatt-hours (kWh). A kW is a measure of 1,000 watts of electrical power and a kWh is a measure of electrical energy equivalent to a power consumption of 1,000 watts for one hour. The kWh is commonly used as a billing unit for energy delivered to consumers by electric utilities. A gigawatt is equal to one million kW. Overall electricity consumption in California was 288,282 gigawatt-hours (GWh) in 2020 (CEC 2022c)

Southern California Edison (SCE)

The City is in SCE's service area, which spans much of southern California from Orange and Riverside counties on the south to Santa Barbara County on the west to Mono County on the north (CEC 2022a). Total electricity consumption in the service area was 103,597 GWh in 2020 (CEC 2022c). Sources of electricity sold by SCE in 2020, the latest year for which data are available, were:

- 30.9 percent renewable, consisting mostly of solar and wind
- 3.3 percent large hydroelectric
- 15.2 percent natural gas
- 8.4 percent nuclear
- 0.3 percent other
- 42.0 percent unspecified sources—that is, not traceable to specific sources (SCE 2020)[2]

Clean Power Alliance

The CPA is a nonprofit default electricity provider for over 30 public agencies in Southern California and started to service the City of Moorpark in 2019. CPA provides electricity generated from renewable sources, such as solar, wind, biomass, bio-waste, geothermal, and hydroelectric, and delivers to customers through

[2] The electricity sources listed reflect changes after the 2013 closure of the San Onofre Nuclear Generating Station, which is owned by SCE. Numbers are rounded up and may cause the total to not add up to exactly 100 percent.

SCE transmission lines. Customers in the city are automatically enrolled in the CPA's "Clean Power" energy plan when they establish a new energy supply connection with CPA, which delivers over 50 percent clean power (CPA 2022a). Sources of electricity sold by CPA under the "Clean Power" plan in 2020, the latest year for which data are available, were:

- 50.1 percent renewable, consisting mostly of geothermal and solar
- 9.1 percent large hydroelectric
- 0.1 percent natural gas
- 0.2 percent other
- 40.5 percent unspecified sources—that is, not traceable to specific sources (CPA 2021)[3]

Customers have the option of opting up to "100% Green Power" plan, which provides 100 percent renewable and carbon-free electricity (CPA 2022a). Conversely, customers have the option to opt out of CPA renewable energy sources and receive their energy service from SCE. SCE is responsible for maintaining transmission lines, handling customer billing, and responding to new service requests and emergencies.

Total existing electricity demand in Moorpark is estimated at 168,481,218 kWh per year (168.4 GWh per year), as shown in Table 5.6-1, *Existing Electricity Demand*.

Table 5.6-1 Existing Electricity Demand

Area	Electricity Usage (kWh per year)
Residential	77,309,009
Nonresidential	89,172,209
Total	166,481,218

Note: The 2022 annual electricity consumption was interpolated based on data provided by SCE for years 2016-2019.

Natural Gas

Gas is typically quantified using the "therm," which is a unit of heat energy equal to 100,000 British thermal units (BTU) and is the energy equivalent of burning 100 cubic feet of natural gas. SoCalGas provides natural gas service in and has facilities throughout Moorpark. The service area of SoCalGas spans much of the southern half of California, from Imperial County on the southeast to San Luis Obispo County on the northwest to part of Fresno County on the north to Riverside County and most of San Bernardino County on the east (CEC 2022b). Average daily natural gas supplies available to SoCalGas for years 2020 through 2022 were 3.175 billion cubic feet per day. Average daily natural gas consumption in SoCalGas' service area is forecast to be 2.103 billion cubic feet per day in 2035 (SoCalGas 2020). Total natural gas consumption in the SoCalGas service area was 695,049 million cubic feet for 2020, which is equivalent to 1,899 million cubic feet per day (CEC 2022d).

[3] Unspecified power is electricity that has been purchased through open market transactions and is not traceable to a specific generation source.

Existing natural gas demands in the City, based on data provided by SoCalGas, are estimated at 7 million therms per year, as shown in Table 5.6-2, *Existing Natural Gas Demand*.

Table 5.6-2 Existing Natural Gas Demand

Sector	Natural Gas Usage (Therms per year)
Residential	5,712,436
Nonresidential	985,727
Total	**6,698,164**

Note: Used past four-year (2016–2019) natural gas consumption provided by SoCalGas to extrapolate an estimate for existing baseline natural gas demand.

5.6.2 Thresholds of Significance

According to Appendix G of the CEQA Guidelines, a project would normally have a significant effect on the environment if the project would:

E-1 Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation.

E-2 Conflict with or obstruct a state or local plan for renewable energy or energy efficiency.

The analysis also utilizes considerations identified in Appendix F of the CEQA Guidelines, as appropriate, to assist in answering the Appendix G questions. The factors to evaluate energy impacts under CEQA Guidelines checklist question E-1 include:

- The project's energy requirements and its energy use efficiencies by amount and fuel type for each stage of the project including construction, operation, maintenance and/or removal. If appropriate, the energy intensiveness of materials maybe discussed.
- The effects of the project on local and regional energy supplies and on requirements for additional capacity.
- The effects of the project on peak and base period demands for electricity and other forms of energy.
- The degree to which the project complies with existing energy standards.
- The effects of the project on energy resources.
- The project's projected transportation energy use requirements and its overall use of efficient transportation alternatives.

5.6.3 Environmental Impacts

5.6.3.1 METHODOLOGY

The following is a summary of the assumptions used for the City's energy analysis:

- **On-Road Fuel Use.** Fuel use was modeled in based on Origin-Destination Method VMT provided by Iteris (see Section 5.18, *Transportation*), and modeled using CARB's EMFAC2021 v.1.0.2 web database (Appendix D). The VMT provided includes the full trip length for land uses in the city (origin-destination approach) and a 50 percent reduction in the trip length for external-internal/internal-external trips, consistent with the recommendations of CARB's Regional Targets Advisory Committee.

- **Energy (Natural Gas and Electricity).** Emissions associated with natural gas use for residential and nonresidential land uses in the city were interpolated based on data provided by SoCalGas, and electricity was interpolated based on data provided by SCE (Appendix D). Year 2050 forecasts are adjusted for increases in population and employment in the city. It should be noted that in year 2019, Moorpark transitioned to CPA for electricity, and all new end-users in the city would be automatically enrolled per AB 117. As mentioned in Chapter 5.8, *Greenhouse Gas Emissions*, the GHG analysis utilized SCE's carbon intensity for existing conditions as a conservative estimate for energy usage due to the ability of end-users to opt out of CPA's electricity service.

5.6.3.2 IMPACT ANALYSIS

The applicable thresholds are identified in brackets after the impact statement.

Impact 5.6-1: Implementation of the Moorpark General Plan 2050 would not result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources. [Threshold E-1]

Short-Term Construction Impacts

Construction of individual development projects facilitated by the Moorpark General Plan 2050 would create temporary demands for electricity. Natural gas is not generally required to power construction equipment, and therefore is not anticipated during construction phases. Electricity use would fluctuate according to the phase of construction. Additionally, it is anticipated that most electric-powered construction equipment would be hand tools (e.g., power drills, table saws, compressors) and lighting, which would result in minimal electricity usage during construction activities.

Future individual development projects would also temporarily increase demands for energy associated with transportation. Transportation energy use depends on the type and number of trips, VMT, fuel efficiency of vehicles, and travel mode. Energy use during construction would come from the transport and use of construction equipment, delivery vehicles and haul trucks, and construction employee vehicles that would use diesel fuel or gasoline. The use of energy resources by these vehicles would fluctuate according to the phase of construction and would be temporary. It is anticipated that most off-road construction equipment, such as

those used during demolition and grading, would be gas or diesel powered. In addition, all operation of construction equipment would cease upon completion of project construction.

Furthermore, the construction contractors would minimize nonessential idling of construction equipment during construction in accordance with the California Code of Regulations Title 13, Article 4.8, Chapter 9, Section 2449. Such required practices would limit wasteful and unnecessary energy consumption during the construction of individual development project facilitated by the Moorpark General Plan 2050. Therefore, the construction of individual development projects facilitated by the proposed project would not result in wasteful, inefficient, or unnecessary consumption of fuel use.

Long-Term Impacts During Operation

Operation of new development projects accommodated under the Moorpark General Plan 2050 would create additional demands for electricity and natural gas compared to existing conditions. Operational use of electricity and natural gas would include heating, cooling, and ventilation of buildings; water heating; operation of electrical systems; use of on-site equipment and appliances; and lighting.

Nontransportation Energy

Electrical service to the city is provided by SCE and CPA through connections to existing off-site electrical lines and new on-site infrastructure. As shown in Table 5.6-3, *Year 2050 Forecast Electricity Consumption*, by horizon year 2050, electricity use in the city would increase by 85,344,131 kWh/year, or approximately 51 percent, from existing conditions.

Table 5.6-3 Year 2050 Forecast Electricity Consumption

Area	Electricity Usage, kWh per year (Subtotal)		
	Existing Baseline[1]	Horizon Year 2050 Forecast[2]	Net Change
Residential	89,172,209	114,083,893	36,774,884
Nonresidential	77,309,009	137,741,456	48,569,247
Total	**166,481,218**	**251,825,349**	**85,344,131**

1 The annual 2022 electricity usage was interpolated based on past data (years 2016-2019) provided by SCE.
2 Residential energy and nonresidential energy forecasts are adjusted for increases in housing and employment, respectively, and do not account for reductions due to increase in energy efficiency from compliance with future Building Energy Efficiency Standards and updates to CALGreen.

As shown in Table 5.6-4, *Year 2050 Forecast Natural Gas Consumption*, existing natural gas use in the city totals 6,698,164 therms annually. By 2050, natural gas use in the City would increase by 3,254,225 therms annually, or approximately 49 percent, from existing conditions to a total of 9,952,389 therms per year.

Table 5.6-4 Year 2050 Forecast Natural Gas Consumption

Area	Natural Gas Usage, therms per year (Subtotal)		
	Existing Baseline[1]	Horizon Year 2050 Forecast[2]	Net Change
Residential	5,712,436	1,522,621	-4,189,815
Nonresidential	985,727	8,429,767	7,444,040
Total	**6,698,164**	**9,952,389**	**3,254,225**

[1] Existing natural gas usage baseline was interpolated from past natural gas usage (years 2016-2019) provided by SoCalGas.
[2] Residential energy and nonresidential energy forecasts are adjusted for increases in housing and employment, respectively, and do not account for reductions due to increase in energy efficiency from compliance with the Building Energy Efficiency Standards and CALGreen.

While the electricity and natural gas demand for the city would increase compared to existing conditions, development accommodated under the Moorpark General Plan 2050 would be required to comply with the current and future updates to the Building Energy Efficiency Standards and CALGreen, which would contribute to reducing the energy demands shown in Tables 5.6-3 and 5.6-4. New and replacement buildings in compliance with these standards would generally have greater energy efficiency than existing buildings. It is anticipated that each update to the Building Energy Efficiency Standards and CALGreen would result in greater building energy efficiency and move closer toward buildings achieving ZNE.

In addition to the Building Energy Efficiency Standards and CALGreen, the Moorpark General Plan 2050 includes policies to increase energy efficiency and reduce wasteful, inefficient use of energy resources under Conservation Element Policies COS-4.1 through COS-4.9. In addition, Land Use Element Policies LU-8.2, LU-8.4, and LU-16.9 and Circulation Element Policy CI-13.7 also include policies to reduce energy use.

Encouraging sustainable and energy-efficient building practices and using more renewable energy strategies would further reduce energy consumption and move closer toward achieving ZNE goals.

Transportation Energy

The growth accommodated under the Moorpark General Plan 2050 would consume transportation energy from the use of motor vehicles (e.g., gasoline, diesel, compressed natural gas, and electricity). As shown in Table 5.3-9 of Chapter 5.3, *Air Quality,* implementation of the proposed project would increase daily VMT by 129,698 vehicle miles per day in the City, or about 27 percent, when compared to existing conditions. Service population would also increase under the proposed project by 24,670 people, or about 50 percent. Overall, implementation of the proposed project would result in 15 percent lower VMT per service population than under existing conditions.

The Current General Plan conditions (i.e., growth that would occur as currently allowed and projected under the Moorpark General Plan 2050) would increase daily VMT by approximately 13 percent, increase service population by 19 percent, and decrease VMT per service population by 5 percent in the Moorpark. This indicates that buildout conditions under the proposed project would be more efficient in reducing VMT on a per service population basis, thus reducing energy demand from transportation.

The increase in daily VMT and fuel usage would be primarily caused by the growth associated with the Moorpark General Plan 2050 compared to existing conditions. As discussed in Chapter 5.14, *Population and*

Housing, the projected growth from the proposed project would exceed the growth projections in SCAG's RTP/SCS growth forecasts for this region. While VMT and fuel usage would generally increase from implementation of the Moorpark General Plan 2050 when compared to existing uses under horizon year conditions, the fuel efficiency would be the same. Additionally, fuel efficiency of vehicles under year 2050 conditions would improve compared to baseline year 2022. The improvement in fuel efficiency would be attributable to regulatory compliance (e.g., CAFE standards), resulting in new cars that are more fuel efficient and the attrition of older, less fuel-efficient vehicles. The CAFE standards are not directly applicable to residents or land use development projects, but to car manufacturers. Thus, residents and employees of Moorpark do not have direct control in determining the fuel efficiency of vehicles manufactured and made available. However, compliance with the CAFE standards by car manufacturers would ensure that vehicles produced in future years have greater fuel efficiency and would generally result in an overall benefit of reducing fuel usage by providing the population of the city with more fuel-efficient vehicle options.

Furthermore, while the demand in electricity would increase under the proposed project, in conjunction with the regulatory (i.e., Renewables Portfolio Standard, as amended by SB 350 SB 100, and SB 1020) and general trend toward increasing the supply and production of energy from renewable sources, it is anticipated that a greater share of electricity used to power electric vehicles would be from renewable sources in future years (e.g., individual photovoltaic systems, purchased electricity from SCE and CPA, and/or purchased electricity from SCE and CPA that is generated from renewable sources).

In addition to regulatory compliance that would contribute to more fuel-efficient vehicles and less demand in fuels, the Moorpark General Plan 2050 includes policies that would contribute to minimizing overall VMT, and thus fuel usage, including Land Use Element Policies LU-3.7, LU-4.1, and LU-15.5; Circulation Element Policies CI-2.2 and CI-6.1; and Conservation Element Policies COS-1.2 through COS-1.4, COS-1.6, and COS-9.1.

Collectively, the policies and action listed above would minimize overall VMT, and thus fuel usage associated with potential future development in Moorpark. Furthermore, the proposed project would rely on infill development for projected growth in the Moorpark region, thus contributing to reduced energy use from the transportation sector. Although population and VMT are projected to grow, the jobs-housing ratio would slightly improve to be closer to a more equal distribution of employment and housing (see Impact 5.14-1 of this DEIR). Having a more balanced jobs-to-housing mix would encourage the creation of more employment opportunities for residents. Therefore, this could result in shorter distances traveled between where people work and live and to amenities. The proposed project would also encourage people to forego vehicle travel altogether and either bike, walk, or take public transportation, which would also contribute to minimizing VMT.

Summary

Compliance with federal, State, and local regulations (e.g., Building Energy Efficiency Standards, CALGreen, Renewable Portfolio Standards, and CAFE standards) would increase building energy efficiency and vehicle fuel efficiency and reduce building energy demand and transportation-related fuel usage. Additionally, the Moorpark General Plan 2050 includes policies related to land use and transportation planning and design,

energy efficiency, public and active transit, and renewable energy generation that would contribute to minimizing building and transportation-related energy demands overall and demands on nonrenewable sources of energy. Implementation of proposed policies under the Moorpark General Plan 2050 in conjunction with and complementary to regulatory requirements, would ensure that energy demand associated with growth under the Moorpark General Plan 2050 would not be inefficient, wasteful, or unnecessary. Therefore, energy impacts associated with implementation and operation of land uses accommodated under the Moorpark General Plan 2050 would be less than significant.

Level of Significance Before Mitigation: Less than significant.

Impact 5.6-2: The Moorpark General Plan 2050 would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency. [Threshold E-2]

The state's electricity grid is transitioning to renewable energy under California's RPS Program. Renewable sources of electricity include wind, small hydropower, solar, geothermal, biomass, and biogas. As stated, the RPS goals have been updated since adoption of SB 1078 in 2002. In general, California has RPS requirements of 33 percent renewable energy by 2020 (SB X1-2), 40 percent by 2024 (SB 350), 50 percent by 2026 (SB 100), 60 percent by 2030 (SB 100), 90 percent by 2035 (SB 1020), and 100 percent by 2045 (SB 100 and SB 1020).

SB 100 also establishes RPS requirements for publicly owned utilities that consist of 44 percent renewable energy by 2024, 52 percent by 2027, and 60 percent by 2030. SB 1020 also requires zero-carbon resources to reach 100 percent clean electricity by 2045. The statewide RPS requirements do not directly apply to individual development projects but to utilities and energy providers such as SCE or CPA, whose compliance with RPS requirements would contribute to the State of California objective of transitioning to renewable energy. The land uses accommodated under the Moorpark General Plan 2050 would comply with the current and future iterations of the Building Energy Efficiency Standards and CALGreen.

Furthermore, as discussed for Impact 5.6-1, the Moorpark General Plan 2050 includes Land Use Element Policy LU-4.1, Circulation Element Policy CI-13.7, and Conservation Element Policies COS-4.6, COS-4.7, and COS-4.8, which would support the statewide goal of transitioning the electricity grid to renewable sources. Furthermore, GHG impact 5.8-1 discusses more proposed policies that would aid in reducing the energy sector emission through the use of renewable energy. Therefore, implementation of the Moorpark General Plan 2050 would not conflict with or obstruct implementation of California's RPS program, and no impact would occur.

Level of Significance Before Mitigation: Less than significant.

5.6.4 Relevant General Plan Policies

Land Use Element

- **Policy LU-3.7 Transit-oriented development.** Promote opportunities to develop uses that can economically benefit from their proximity to the Moorpark Metrolink station and promote increased ridership.

- **Policy LU-4.1 Sustainable urban form.** Provide an overall pattern of land uses that promotes efficient development; reduces automobile dependence, greenhouse gas emissions; and consumption of non-renewable resources; ensures compatibility among uses; enhances community livability and health; and sustains economic vitality.

- **Policy LU-8.1 Model of environmental sustainability.** Establish Moorpark as a leader of land use development practices that contribute to the sustainability and stewardship of environmental resources including air quality protection, energy and water efficiency, natural resource conservation, greenhouse gas reduction, and climate change resiliency..

- **Policy LU-8.2 Reduction of energy and water use.** Encourage developers to exceed standards for building design and construction specified by the California Green Building Standards Code, with goals of achieving net zero energy and water use.

- **Policy LU-8.4 Adaptive re-use of existing buildings.** Encourage the adaptive reuse of structures as a means of minimizing waste, capitalizing on a building's embodied energy, and supporting environmental sustainability.

- **Policy LU-15.5 Active mixed-use districts.** Require that sites and corridors integrating housing and commercial/office uses are designed to establish the character of distinct, cohesive, and pedestrian-oriented places that are linked with and walkable from adjoining residential neighborhoods. Contributing elements may include:

  a) Wide sidewalks, plazas, and courtyards along building frontages for outdoor dining and gathering

  b) Pedestrian walkways connecting parking areas with buildings and public spaces that are well defined by paving materials, landscaping, lighting, and way-finding signage

  c) Landscaping that is sustainable and contributes to the aesthetic and economic value of the center and provides a tree canopy reducing the heat island effect and greenhouse gas emissions

  d) Buildings oriented toward the street and public spaces with parking located to the rear of the buildings, underground, or in structures

- **Policy LU-16.9 Alternative energy infrastructure.** Encourage large scale industrial development projects, as defined in the Municipal Code, to provide on-site alternative energy sources and containment of stormwater runoff.

Circulation Element

- **Policy CI-2.2 Environmental impact threshold.** Maintain thresholds for the determination of environmental impacts for proposed residential, commercial and industrial uses of a minimum reduction of per capita vehicle miles travelled (VMT) of 15% below existing and no net increase in per capita VMT compared to existing for all other land use types. Periodically review and adjust this threshold as appropriate in consideration of actual vehicle miles and greenhouse gas emissions resulting from implementation of the Land Use Plan.

- **Policy CI-6.1 Employer incentives.** Encourage businesses to provide incentives for employees to utilize alternatives to the conventional automobile transportation to reduce energy consumption, noise pollution, air pollution, and greenhouse gas emissions, such as shared ride programs, parking cash out , transit benefits, allowing telecommuting and alternative work schedules.

- **Policy CI-13.1 Adequate service and facilities.** Continue to work with local utility providers to ensure that adequate electricity and natural gas services are available for existing and newly developing areas.

- **Policy CI-13.2 Integration of Energy Utility Systems.** Work with utility providers to ensure that energy facilities are located and designed to be visually compatible with the built environment and natural settings.

- **Policy CI-13.4 Energy Reliability.** Support and encourage efforts by local energy service providers and other public agencies to improve the safety and resilience of the local power grid.

- **Policy CI-13.5 Backup Energy Provision**. Work with utility providers and local energy service providers to ensure adequate backup energy provisions for critical public facilities and wireless infrastructure and upgrade as needed.

- **Policy CI-13.6 Microgrids.** Work with utility providers and local energy service providers to explore the use of microgrids allowing locally-generated renewable energy networks to supplement the electrical distribution system and provide back-up power in the event of an emergency.

- **Policy CI-13.7 Energy Conservation.** Support increased use of renewable energy sources through energy conservation, efficiency, and renewable resource strategies, as identified in Conservation Element.

Open Space, Parks and Recreation Element

- **Policy OSPR-1.12 Sustainability features.** Require that new parks are designed, and existing parks are retrofitted over time, to incorporate sustainable development and landscape practices that reduce water and energy consumption.

Conservation Element

- **Policy COS-1.2 Infill development.** Promote infill development to facilitate walking and use of alternative transportation modes and reduce vehicle trips and air emissions.

- **Policy COS-1.3 Development siting.** Require that development be located and designed to reduce the number of vehicle trips generated and air emissions.
- **Policy COS-1.4 Low-emission transportation.** Encourage the use of zero-emission vehicles, low-emission vehicles, bicycles and other non-motorized vehicles, and car-sharing programs by requiring sufficient and convenient infrastructure and parking facilities in residential developments and employment centers to accommodate these vehicles.
- **Policy COS-1.5 Low-emission fleet.** Purchase low-emission vehicles for the City's fleet and to use available clean fuel sources for trucks and heavy equipment.
- **Policy COS-1.6 Clean City transportation options.** Promote reduced idling, trip reduction, routing for efficiency, and the use of public transportation, carpooling, and alternate modes of transportation for City operations.
- **Policy COS-4.1 New building energy efficiency.** Encourage new buildings to exceed state energy efficiency requirements where cost-effective and equitable, including through the use of improved insulation, all-electric heating and cooling systems, and high-efficiency appliances.
- **Policy COS-4.2 Passive energy conservation.** Require that buildings in large scale commercial, mixed-use, and planned development projects include, to the extent feasible, passive energy-conservation strategies including, but not limited to, location and orientation.
- **Policy COS-4.3 Energy efficiency improvements.** Work with property owners to conduct energy efficiency retrofits and other improvements to existing buildings, particularly rental units and buildings constructed before 1980. Emphasize ways to improve the energy efficiency of existing buildings that are equitable and cost-effective.
- **Policy COS-4.4 Low-cost energy efficiency.** Enact widespread energy efficiency and conservation practices that are accessible and feasible for most or all of the community, including low-cost and free actions and those with accelerated payback periods.
- **Policy COS-4.5 Carbon-free transition.** Transition to low-carbon and carbon-free energy sources for homes and nonresidential buildings.
- **Policy COS-4.6 On-site renewable energy.** Increase the installation of on-site renewable energy systems in all new and existing developments with the capacity to support these systems, enforcing the renewable energy requirements of the California Building Standards Code and encouraging buildings not covered by state requirements to install renewable energy systems.
- **Policy COS-4.7 Energy storage systems.** Encourage new and existing developments to install energy storage systems, particularly for developments in Very High Fire Hazard Severity Zones and for developments providing essential community services.

- **Policy COS-4.8 Energy use at City facilities.** Retrofit City facilities to improve energy efficiency, decrease natural gas use, and install renewable energy and energy storage systems.
- **Policy COS-4.9 Green building practices.** Provide information about, and encourage, incorporating additional green building practices into new development and major retrofits, including active and passive energy-conservation strategies, low-carbon, sustainable building materials, and reuse of building materials.
- **Policy COS-4.10 Regional energy collaboration.** Collaborate with the Ventura County Regional Energy Alliance, the Clean Power Alliance, and other regional energy groups to promote educational campaigns and financial incentives for energy efficiency and conservation, renewable energy, and energy storage.
- **Policy COS-8.1 Greenhouse gas reduction.** Reduce community-wide and City operations greenhouse gas (GHG) emissions from vehicles, residential, and nonresidential energy use, waste generation, water and wastewater collection and treatment, off-road uses, and other GHG emission sources to meet or exceed the State's goal to achieve carbon neutrality by 2045.

Safety Element

- **Policy SE-1.8 Renewable back-up energy.** Provide renewable back-up power supplies, such as solar, wind, and battery power, for critical facilities, including cooling centers and resilience hubs.
- **Policy SE-1.13 Resilience hubs.** Establish a network of equitably located resilience hubs throughout Moorpark and ensure that resilience hubs are situated outside of areas at risk from hazard impacts to the extent possible, offer refuge from extreme heat and poor air quality due to regional wildfire smoke, and are equipped with renewable energy generation and backup power supplies. Such facilities should be in easily accessible locations and be available to all community members.
- **Policy SE-5.7 Sustainable and resilience facilities.** Encourage new developments and existing property owners to incorporate sustainable, energy-efficient, and environmentally regenerative features into their facilities, landscapes, and structures to reduce energy demands and improve on-site resilience. Support financing efforts to increase the communities funding of these features.
- **Policy SE-5.9 Backup energy supplies.** Collaborate with Southern California Edison and organizations such as the Independent Living Resource Center to ensure that those who depend on electricity supply for medical devices and refrigerating medication have backup energy supplies during extreme heat and extreme wind events.

5.6.5 Level of Significance Before Mitigation

Upon implementation of regulatory requirements and standard conditions of approval, these impacts would be less than significant: 5.6-1 and 5.6-2.

5.6.6 Mitigation Measures

No mitigation required.

5.6.7 Level of Significance After Mitigation

No significant energy impacts were identified, and no mitigation measures are warranted.

5.6.8 References

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5.7 GEOLOGY AND SOILS

This section of the Draft Environmental Impact Report (DEIR) evaluates the potential for implementation of the Moorpark General Plan 2050 (proposed project) to impact geological and soil resources, paleontological resources, or unique geologic features in the City of Moorpark. See Section 5.5, *Cultural Resources*, of this DEIR for a discussion regarding archeological resources. The paleontological analysis in this section is based on the following:

- *Summary of Paleontological Findings, Moorpark General Plan Update,* ECORP Consulting, September 2022.

A complete copy of this study is included as Appendix G of this DEIR.

5.7.1 Environmental Setting

5.7.1.1 REGULATORY BACKGROUND

Federal Laws

Paleontological Resources

Paleontological Resources Preservation Act

The federal Paleontological Resources Preservation Act of 2002 (PRPA) limits the collection of vertebrate fossils and other rare and scientifically significant fossils to qualified researchers who have obtained a permit from the appropriate State or federal agency. Additionally, it specifies these researchers must agree to donate any materials recovered to recognized public institutions, where they will remain accessible to the public and to other researchers. This Act incorporates key findings of a report, "Fossils on Federal Land and Indian Lands," issued by the Secretary of Interior in 2000, which establishes that most vertebrate fossils and some invertebrate and plant fossils are considered rare resources (USDI 2000). In passing the PRPA, Congress officially recognized the scientific importance of paleontological resources on some federal lands by declaring that fossils from these lands are federal property that must be preserved and protected. The PRPA codifies existing policies of the Bureau of Land Management, National Park Service, US Forest Service, Bureau of Reclamation, and US Fish and Wildlife Service, and provides the following:

- Uniform criminal and civil penalties for illegal sale and transport, and theft and vandalism of fossils from federal lands.
- Uniform minimum requirements for paleontological resource-use permit issuance (terms, conditions, and qualifications of applicants).
- Uniform definitions for "paleontological resources" and "casual collecting."
- Uniform requirements for curation of federal fossils in approved repositories.

National Environmental Policy Act of 1969

The National Environmental Policy Act of 1969 (NEPA), as amended, recognizes the continuing responsibility of the federal government to "preserve important historic, cultural, and natural aspects of our national heritage…." (Sec. 101 [42 US Code sec. 4321]) #382). With the passage of the PRPA, paleontological resources are considered a significant resource, and it is now standard practice to include paleontological resources in NEPA studies in all instances where there is a possible impact.

Antiquities Act of 1906

The Antiquities Act of 1906 states, in part:

> That any person who shall appropriate, excavate, injure or destroy any historic or prehistoric ruin or monument, or any object of antiquity, situated on lands owned or controlled by the Government of the United States, without the permission of the Secretary of the Department of the Government having jurisdiction over the lands on which said antiquities are situated, shall upon conviction, be fined in a sum of not more than five hundred dollars or be imprisoned for a period of not more than ninety days, or shall suffer both fine and imprisonment, in the discretion of the court. (16 US Code secs. 431–433)

Although there is no specific mention of natural or paleontological resources in the act itself, or in the act's uniform rules and regulations (Title 43 Part 3, Code of Federal Regulations [43 CFR 3]), the term "objects of antiquity" has been interpreted to include fossils by the National Park Service, Bureau of Land Management, the US Forest Service, and other federal agencies. Permits to collect fossils on lands administered by federal agencies are authorized under this act; however, large gray areas, left open to interpretation, are due to the imprecision of the wording, so agencies are hesitant to interpret this act as governing paleontological resources.

State Laws

Geologic Hazards

Alquist-Priolo Earthquake Fault Zoning Act

The Alquist-Priolo Earthquake Fault Zoning Act was passed in 1972 to mitigate the hazard of surface fault rupture to structures used for human occupancy. The main purpose of this Act is to prevent the construction of buildings used for human occupancy on top of active faults. This Act only addresses the hazard of surface fault rupture and is not directed toward other earthquake hazards, such as earthquake-induced liquefaction or landslides.

This Act requires the State Geologist to establish regulatory zones (known as Earthquake Fault Zones or Alquist-Priolo Zones) around surface traces of active faults, and to issue appropriate maps. The maps, which are developed using existing United States Geological Survey's 7.5-minute quadrangle map bases, are then distributed to all affected cities, counties, and State agencies for their use in planning and controlling new or renewed construction. Pursuant to this act, structures for human occupancy are not allowed within 50 feet of the trace of an active fault.

Seismic Hazard Mapping Act

The Seismic Hazard Mapping Act was adopted by the state in 1990 to protect the public from the effects of earthquake hazards other than surface fault rupture, including strong ground shaking, liquefaction, seismically induced landslides, or other ground failure caused by earthquakes. The goal of the act is to minimize loss of life and property by identifying and mitigating seismic hazards. The California Geological Survey prepares and provides local governments with seismic hazard zone maps that identify areas susceptible to amplified shaking, liquefaction, earthquake-induced landslides, and other ground failures. The act requires responsible agencies to only approve projects within seismic hazard zones following a site-specific investigation to determine if the hazard is present, and if so, the inclusion of appropriate mitigation(s). In addition, the act requires real estate sellers and agents at the time of sale to disclose whether a property is within one of the designated seismic hazard zones.

California Building Code

Current law states that every local agency enforcing building regulations, such as cities and counties, must adopt the provisions of the California Building Code (CBC) within 180 days of its publication. The publication date of the CBC is established by the California Building Standards Commission and the code is also known as Title 24, Part 2 of the California Code of Regulations. The most recent building standard adopted by the legislature and used throughout the state is the 2019 version of the CBC (effective January 1, 2020), often with local, more restrictive amendments that are based on local geographic, topographic, or climatic conditions. These codes provide minimum standards to protect property and public safety by regulating the design and construction of excavations, foundations, building frames, retaining walls, and other building elements to mitigate the effects of seismic shaking and adverse soil conditions. The CBC contains provisions for earthquake safety based on factors including occupancy type, the types of soil and rock on-site, and the strength of ground shaking with specified probability of occurring at a site.

Natural Hazards Disclosure Act

The Natural Hazards Disclosure Act requires that sellers of real property and their agents provide prospective buyers with a "Natural Hazard Disclosure Statement" when the property being sold lies within one or more state-mapped hazard areas, including a Seismic Hazard Zone. California law also requires that when houses built before 1960 are sold, the seller must give the buyer a completed earthquake hazards disclosure report and a booklet titled "The Homeowners Guide to Earthquake Safety." This publication was written and adopted by the California Seismic Safety Commission.

Soils Investigation Requirements

Requirements for soils investigations for subdivisions requiring tentative and final maps, and for other specified types of structures, are in California Health and Safety Code Sections 17953 to 17955, and in Section 1802 of the CBC. Testing of samples from subsurface investigations is required, such as from borings or test pits. Studies must be done as needed to evaluate slope stability, soil strength, position and adequacy of load-bearing soils, the effect of moisture variation on load-bearing capacity, compressibility, liquefaction, differential settlement, and expansiveness.

Paleontological Resources

California Public Resources Code

Paleontological sites are protected under a wide variety of state policies and regulations in the California Public Resources Code (PRC). In addition, paleontological resources are recognized as nonrenewable resources and receive protection under the PRC and CEQA. PRC Division 5, Chapter 1.7, Section 5097.5, and Division 20, Chapter 3, Section 30244 state:

> No person shall knowingly and willfully excavate upon, or remove, destroy, injure or deface any historic or prehistoric ruins, burial grounds, archaeological or vertebrate paleontological site, including fossilized footprints, inscriptions made by human agency, or any other archaeological, paleontological or historical feature, situated on public lands, except with the express permission of the public agency having jurisdiction over such lands. Violation of this section is a misdemeanor.

This statute prohibits the removal, without permission, of any paleontological site or feature from lands under the jurisdiction of the state or any city, county, district, authority, or public corporation, or any agency thereof. As a result, local agencies are required to comply with PRC 5097.5 for their own activities, including construction and maintenance, as well as for permit actions (e.g., encroachment permits) undertaken by others. PRC Section 5097.5 establishes the removal of paleontological resources as a misdemeanor and requires reasonable mitigation of adverse impacts to paleontological resources from developments on public lands (state, county, city, and district).

Local Laws

Geological Hazards

City of Moorpark Municipal Code

Site development in the city is required to comply with the CBC and all state requirements pertaining to geotechnical hazards and constraints, including soil conditions. The CBC has been incorporated and adopted in its entirety as Title 15, Chapter 15.08 of the Moorpark Municipal Code.

Erosion Control and Sediment Control Plan Requirements.

Prior to issuance of a building permits, the City Engineering Department requires the inclusion of "Erosion and Sediment Control and Contractor Activity Notes" on the grading plan cover sheet. Applicants must also demonstrate conformance with applicable best management practices (BMP), including those recommended by the California Stormwater Quality Association's "Construction BMP Online Handbook" (December 2019) and prepare a Storm Water Pollution Prevention Plan (SWPPP) with a site map that shows the construction site perimeter; existing and proposed buildings, lots, roadways, stormwater collection and discharge points; general topography both before and after construction; and drainage patterns across the project site. The SWPPP must list BMPs that would be implemented to prevent soil erosion and discharge of other construction-related pollutants that could contaminate nearby water resources. Additionally, the SWPPP must contain a visual monitoring program, a chemical monitoring program for nonvisible pollutants if there is a failure of the BMPs, and a sediment-monitoring plan if the site discharges directly to a water body listed on the 303(d) list for sediment.

5.7.1.2 EXISTING CONDITIONS

Geology and Soils

Geologic Setting

The City of Moorpark is in the Little Simi Valley, which consists of a series of coalescing alluvial fans formed by streams flowing out of the Oak Ridge-Santa Susana Mountains to the north and the Las Posas Hills to the south. The Little Simi Valley has a gentle westerly slope of approximately 1 percent, and elevations in Moorpark range from approximately 550 feet above mean sea level in the west to approximately 800 feet above mean sea level in the east. Moorpark lies within the Transverse Ranges geomorphic province, characterized by west-trending mountain ranges extending from Santa Barbara County on the west to San Bernardino and Riverside Counties on the east. The Oak Ridge-Santa Susana Mountains north of Moorpark rise over 3,600 feet above mean sea level.

Geologic Units in the City of Moorpark

The geologic units exposed at the surface in Moorpark consist of alluvial sediments along valley floors and sedimentary rocks in the hilly areas of the city; these units are shown on Figure 5.7-1, *Geologic Map*. In addition, some volcanic rocks are in the Las Posas Hills on the southeastern part of the city. Moving west away from the mountains, the sediments gradually become finer grained, consisting primarily of silt, silty clay, and silty sand. Generally, soils with faster infiltration rates, higher levels of organic matter, and improved soil structure, such as sand, sandy loam, and loam-textured soils, have a greater resistance to erosion than silt, very fine sand, and certain-clay textured soils (OMAFRA 2012).

- **Very Young Wash Deposits (Qw).** These late Holocene sediments consist of unconsolidated sand, gravel, and boulders deposited in active washes or channels on the fan surface. They have essentially no soil developed on the surface, and in terms of engineering characteristics, they are typically compressible, highly permeable, nonexpansive, and very susceptible to erosion. This unit has been mapped in only one small area on the western part of the City, in the active channel of Arroyo Simi.

- **Alluvium, undifferentiated (Qa).** These sediments, also Late Holocene, consist predominantly of sand, gravel, cobbles, and boulders that form the active and recently active portions of the fan. These deposits are generally unconsolidated to slightly consolidated, and where they have not been graded, they have a network of braided channels on the surface. In most areas, these very young deposits have no soil development. This unit is prevalent in the central axis of the Little Simi Valley.

- **Landslide deposits (Qls).** These generally unconsolidated sediments are derived from rock detritus from bedrock and surficial materials, broken in varying degrees from relatively coherent large blocks to disaggregated small fragments, and deposited by landslide processes including slides, slumps, falls, topples and flows. Although most of these deposits are Holocene in age, some may be as old as late Pleistocene. Occurrences have been mapped in the Las Posas Hills and the northwestern part of the City.

- **Young Alluvial Valley Deposits (Qya).** These Holocene to Late Pleistocene deposits occupy areas south of Arroyo Simi along the base of the Las Posas Hills. Consisting of slightly to moderately consolidated silt, sand, and gravel, the engineering characteristics of this unit are similar to the alluvial fan deposits described above.

- **Old Alluvial Fan Deposits (Qof).** These late to middle Pleistocene deposits occupy upland areas of the Little Simi Valley. These deposits are generally slightly to moderately consolidated silt, sand and gravel deposits, and may have moderate to well-developed soils.

- **Saugus Formation (QTs).** This early Pleistocene to late Pliocene cross-bedded sandstone and pebble conglomerate unit is slightly consolidated, and chiefly nonmarine.

- **Conejo Volcanics (Tco).** This middle Miocene unit includes basalt, andesitic basalt, basaltic andesite, andesite, and dacite in a thick sequence of extrusive volcanic flows, flow-breccias, agglomerates and epiclastic volcanic breccias. This occurs in the Las Posas Hills near Tierra Rejada.

- **Sespe Formation (Ts).** This is early Miocene, Oligocene, and late Eocene nonmarine sequence of sandstone, pebbly sandstone, varicolored mudstone and pebble-cobble conglomerate. This formation lies unconformably below the Conejo Volcanics.

Seismic Hazards

Faults

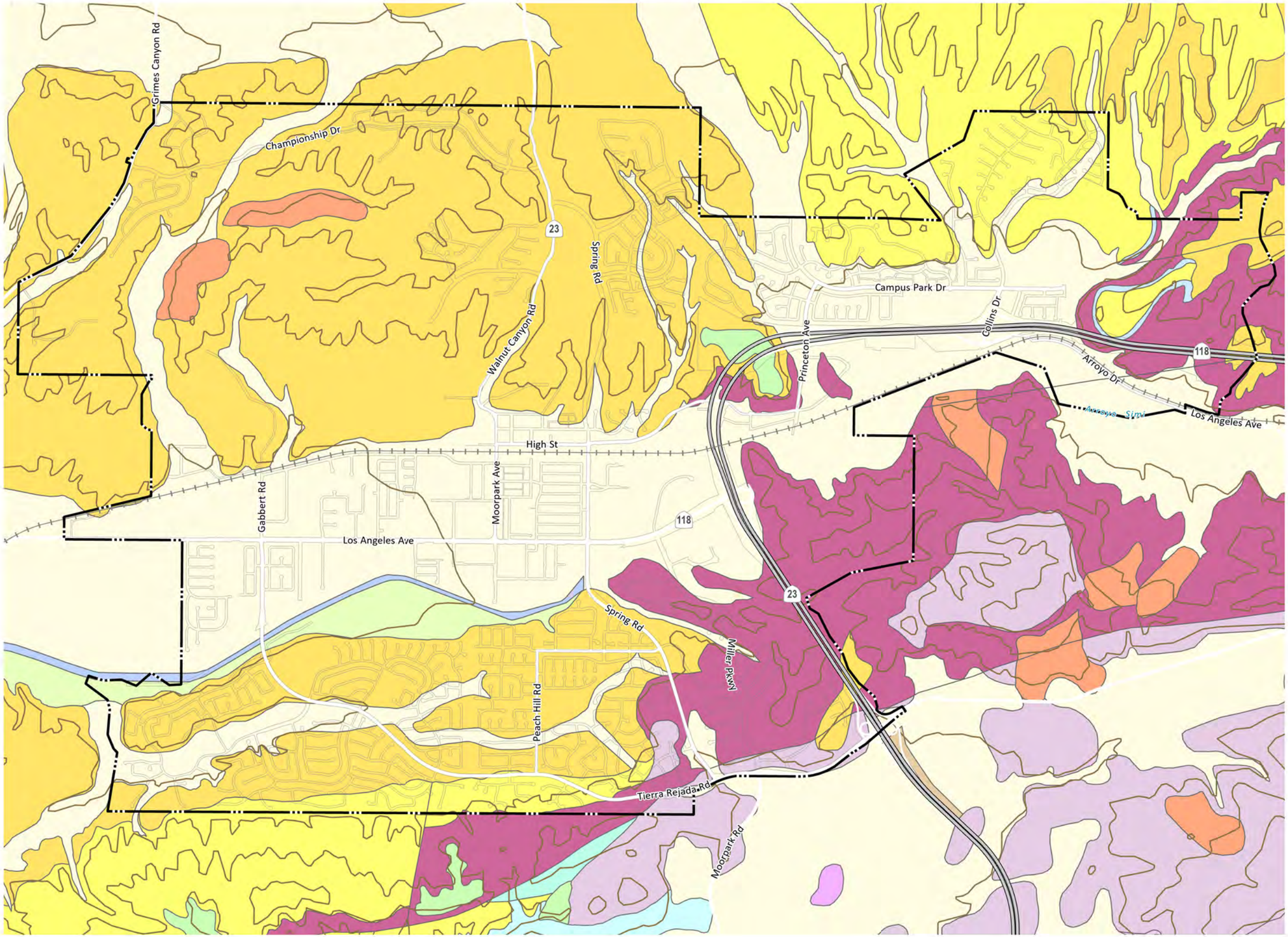
An active fault is defined by the State Mining and Geology Board as a fault that has had surface displacement within Holocene times (approximately within the last 11,000 years) and therefore is considered more likely to generate a future earthquake. Moorpark is in a seismically active area, as is the majority of southern California. As shown on Figure 5.7-2, *Earthquake Zones and Faults in Moorpark*, the southeastern corner of the city is in an Alquist-Priolo Earthquake Fault Zone. Additionally, several major regional faults lie within close proximity to the city.

- **San Andreas Fault Zone.** The San Andreas is the longest and dominant fault in California and consists of five segments. The Carrizo and Mojave segments are the closest to Moorpark, and the most recent major earthquake at this fault near Ventura County was the Fort Tejon earthquake in 1857. It is predicted that there is a 59 percent chance that an earthquake of 6.7 magnitude or larger will occur in the San Andreas Fault within the next 30 years.

- **Simi-Santa Rosa Fault Zone.** The Simi-Santa Rosa Fault Zone extends approximately 17 miles east-west from the Santa Susana Mountains along the northern margin of the Simi and Tierra Rejada valleys and along the southern slope and crest of the Las Posas Hills to their westerly termination. This fault system is designated an Alquist-Priolo Earthquake Fault Zone by the California Geological Survey and crosses the southeastern corner of the city.

Figure 5.7-1

Geologic Map



City Boundary

Contours (40m)

Geologic Units

- Qa
- Qaf
- Qls
- Qoa
- Qof
- QTs
- QTsm
- Qw
- Qya
- Tcb
- Tco
- Tcoab
- Tm?
- Ts

MADE BY MOORPARK General Plan 2050

Draft Environmental Impact Report

0 1,000 2,000 4,000 FT

Source: PlaceWorks, 2022; USGS, 2005 Date: 9/28/2022

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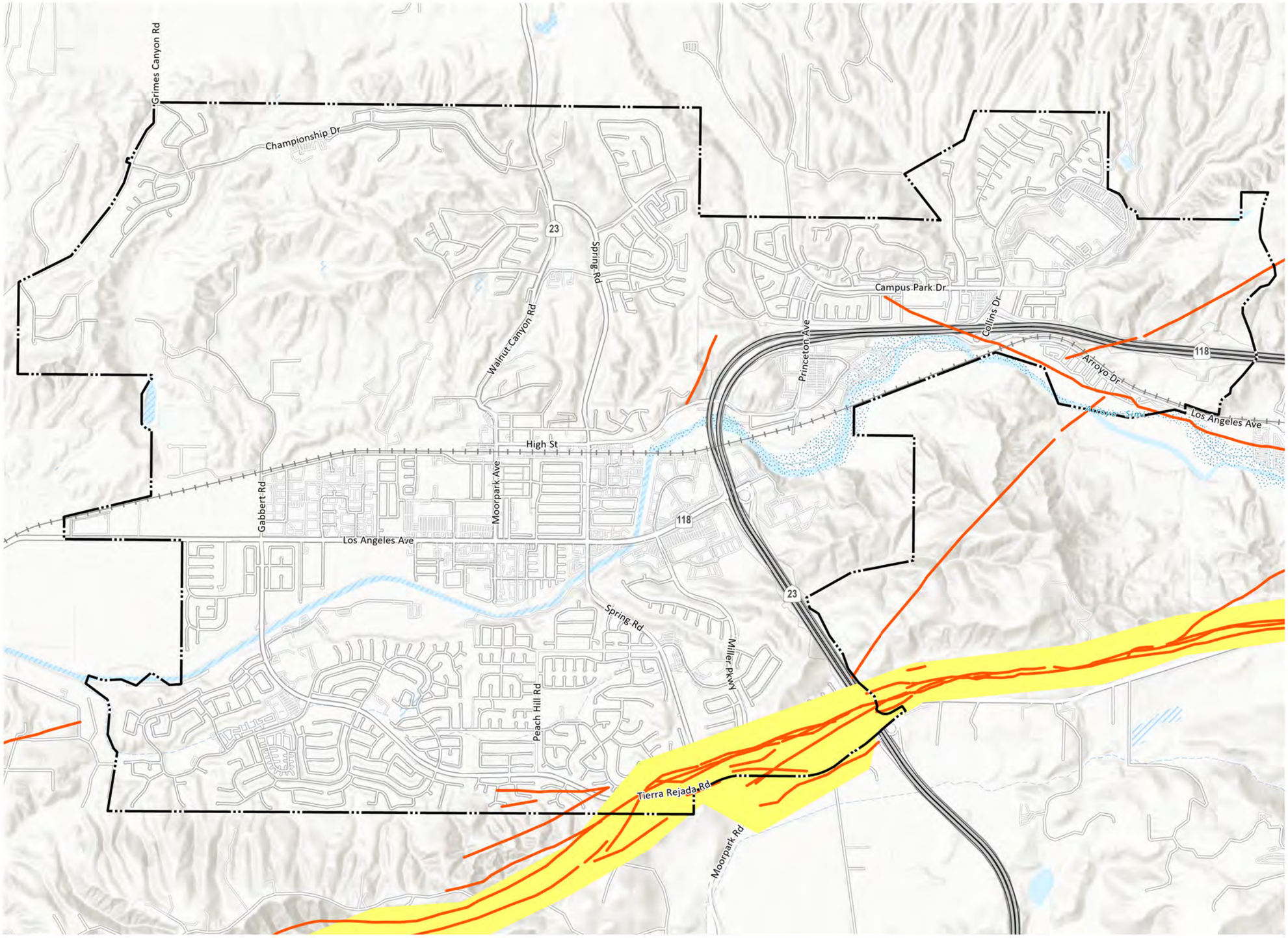
Figure 5.7-2

Earthquake Zones and Faults



City Boundary

Earthquake Faults

Alquist-Priolo Earthquake Fault Zone

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Draft Environmental Impact Report

0 1,000 2,000 4,000 FT

Source: PlaceWorks, 2022

Date: 9/28/2022

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- **Oak Ridge Fault.** The Oak Ridge Fault system is approximately 50 miles long and extends westward from the Santa Susana Mountains along the southerly side of the Santa Clara River Valley and into the Oxnard Plain. The closest segment of this fault system is approximately three miles to the north of the city. The Northridge earthquake in 1994 is believed to have occurred in part of this fault system and caused minor landslides and ridgetop shattering in the hills above Moorpark.

- **San Cayetano Fault.** The San Cayetano Fault runs east-west and is approximately five miles north of the city. It is a north-dipping reverse fault that extends for 25 miles along the northern portion of the Ventura Basin.

- **Santa Susana Fault.** The Santa Susana Fault a north-dipping reverse fault that merges with the Oak Ridge fault on the west and the San Fernando fault on the east. The fault is approximately four miles northeast of the city and it estimated to be capable of generating a 6.7 magnitude earthquake.

Table 5.7-1, *Estimated Maximum Earthquake Magnitude and Distance to Faults in and Near Moorpark*, lists the maximum magnitudes of earthquakes that each fault is capable of and the distance to Moorpark.

Table 5.7-1 Estimated Maximum Earthquake Magnitude and Distance to Faults in and Near Moorpark

Fault	Distance to Moorpark (miles)	Magnitude (Mmax)
Simi-Santa Rosa	0–4	7.0
Oak Ridge	4–8	7.0
Santa Susana	5–11	6.7
San Cayetano	8–12	7.0
San Andreas, Carrizo and Mojave segments	31–36	8.0

Sources: Southern California Earthquake Data Center 2022; US Geological Survey 2022

Surface Rupture of a Fault

Primary ground rupture due to fault movement typically results in a relatively small percentage of the total damage in an earthquake, yet being too close to a rupturing fault can result in extensive damage. It is difficult to safely reduce the effects of this hazard through building and foundation design. Therefore, the primary mitigation measure is to set structures back from the fault zone. Application of this measure is subject to requirements of the Alquist-Priolo Earthquake Fault Zoning Act and guidelines prepared by the California Geological Survey, previously known as the California Division of Mines and Geology. The final approval of a fault setback lies with the local reviewing agency. There are Alquist-Priolo Earthquake Fault Zones in the City of Moorpark associated with the Simi-Santa Rosa fault (CGS 2022).

5. Environmental Analysis
GEOLOGY AND SOILS

Strong Earthquakes

Horizontal ground acceleration, which frequently results in widespread damage to structures, is estimated as a percentage of *g*, the acceleration of gravity. The damage that an earthquake will cause to a structure depends on the earthquake's size, location, distance, and depth; the types of rock and soil at the surface of the site; and the type of construction of the structure.

When comparing the sizes of earthquakes, the most meaningful feature is the amount of energy released. Thus scientists most often consider seismic moment, a measure of the energy released when a fault ruptures. We are more familiar, however, with scales of magnitude, which measure amplitude of ground motion. Magnitude scales are logarithmic. Each one point increase in magnitude represents a 10-fold increase in the size of the waves as measured at a specific location, and a 32-fold increase in energy. That is, a magnitude 7 earthquake produces 100 times (10 x 10) the ground motion of a magnitude 5 earthquake. Similarly, a magnitude 7 earthquake releases approximately 1,000 times more energy (32 x 32) than a magnitude 5 earthquake. Recently, scientists have developed the moment magnitude (Mw) scale to relate energy release to magnitude.

Historical Earthquakes in the Region

Selected historical earthquakes in and near Moorpark are listed in Table 5.7-2*, Selected Historical Earthquakes in and Near Moorpark*.

Table 5.7-2 Selected Historic Earthquakes in and Near Moorpark

Earthquake	Date	Location	Fault	Magnitude	Notable Effects
Wrightwood	1812, December 8	Near Wrightwood, approximately 65 miles east of Moorpark	Unknown; possibly San Andreas	~7.5	40 deaths in collapse of chapel at Mission San Juan Capistrano
Santa Barbara	1812, December 21	Santa Barbara Channel, approximately 56 miles west of Moorpark	Unknown	~7.1	1 confirmed fatality, extensive damage to Missions Santa Barbara and La Purisima Concepcion, and the Santa Barbara Presidio
Fort Tejon	1857, January 9	Near Fort Tejon, approximately 35 miles north of Moorpark	San Andreas	~7.9	2 confirmed fatalities, 220 miles of fault rupture with maximum 30 feet of lateral displacement observed
Santa Barbara	1925, June 29	Offshore of Santa Barbara, approximately 50 miles west of Moorpark	Unknown	6.8	13 fatalities, with $8 million in damage, including 36 city blocks in Santa Barbara that had to be demolished
Kern County	1952, July 21	Wheeler Ridge, approximately 48 miles north of Moorpark	White Wolf fault	7.5	12 fatalities, with at least 18 injuries, with at least $50 million in property damage
Sylmar	1971, February 9	Sylmar, approximately 25 miles east of Moorpark	San Fernando fault zone	6.6	65 fatalities, up to 2,000 injuries, with property damage estimated at over $500 million

Table 5.7-2 Selected Historic Earthquakes in and Near Moorpark

Earthquake	Date	Location	Fault	Magnitude	Notable Effects
Whittier Narrows	1987, October 1	South El Monte, approximately 45 miles southeast of Moorpark	Thrust fault	5.9	8 fatalities; extensive damage to unreinforced masonry buildings in Whittier, Alhambra, and Pasadena
Northridge	1994, January 17	Northridge, approximately 17 miles east-southeast of Moorpark	Northridge Thrust	6.7	57 fatalities, over 8,700 injured, with widespread property damage estimated at $13-50 billion

Sources: Southern California Earthquake Data Center 2022; US Geological Survey 2022

Liquefaction and Related Ground Failure

Liquefaction is a process whereby strong earthquake shaking causes sediment layers that are saturated with groundwater to lose strength and behave as a fluid. This subsurface process can lead to near-surface or surface failure that can damage structures. If surface failure does occur, it is usually expressed as lateral spreading, flow failures, ground oscillation, and/or general loss of bearing strength. Sand boils (injections of fluidized sediment) can commonly accompany these different types of failure.

In order to determine a region's susceptibility to liquefaction, three major factors must be analyzed:

- The intensity and duration of ground shaking.
- The age and textural characteristic of the alluvial sediments. Generally, the younger, less compacted sediments have a higher susceptibility to liquefaction. Textural characteristics also play a dominant role in determining liquefaction susceptibility. Sand and silty sands deposited in river channels and floodplains tend to be more susceptible to liquefaction, and floodplains tend to be more susceptible to liquefaction than coarser or finer grained alluvial materials.
- The depth to the groundwater. Groundwater saturation of sediments is required for earthquake induced liquefaction. In general, groundwater depths shallower than 10 feet to the surface can cause the highest liquefaction susceptibility.

Strong earthquakes can be expected in the Moorpark area on any of the faults in the region listed in Table 5.7-1. Young, loose, unconsolidated sediments, the second factor in liquefaction, are present throughout the Moorpark area on valley and canyon floors. Fine sand and silty sand, the types of sediments most often associated with liquefaction, occur mainly in the valley and canyon portions of Moorpark. The third factor, water-saturated sediments within about 50 feet of the surface, are found in close proximity to Arroyo Simi and its tributaries. Figure 5.7-3, *Seismic Hazard Zones in Moorpark,* depicts the areas where liquefaction is likely within Moorpark.

Seismically Induced Settlement

Strong ground shaking can cause soils to become more tightly packed and settle due to the collapse of voids and pore spaces. This type of settlement typically occurs in soils that are loose, granular, and cohesionless, and can occur in either wet or dry soils. Unconsolidated young alluvial sediments are especially susceptible to this hazard. Seismically induced settlement can cause damage to structures and buried pipelines. Valley portions of the Moorpark area are underlain by young, unconsolidated alluvial deposits that may be susceptible to seismically induced settlement.

Landslides

A landslide is the downslope movement of soil and/or rock. Landslides can range in speed from very rapid to an imperceptible creep. Landslides can be caused by ground shaking from an earthquake or water from rainfall, septic systems, landscaping, or other origins that infiltrates slopes of unstable material. Boulder-strewn hillsides can also pose a boulder-rolling hazard from ground shaking, blasting, or a gradual loosening of their contact with the surface.

The likelihood of a landslide depends on an area's geologic formations, topography, ground-shaking potential, and human influences. Improper or excessive grading can increase the probability of a landslide. Land alterations such as excavation, placement of fill, removal of vegetative cover, and introduction of water from drainage, irrigation, or septic systems may further contribute to slope instability and increase the likelihood of a landslide. Undercutting support at the base of a slope or adding too much weight to the slope can also produce a landslide.

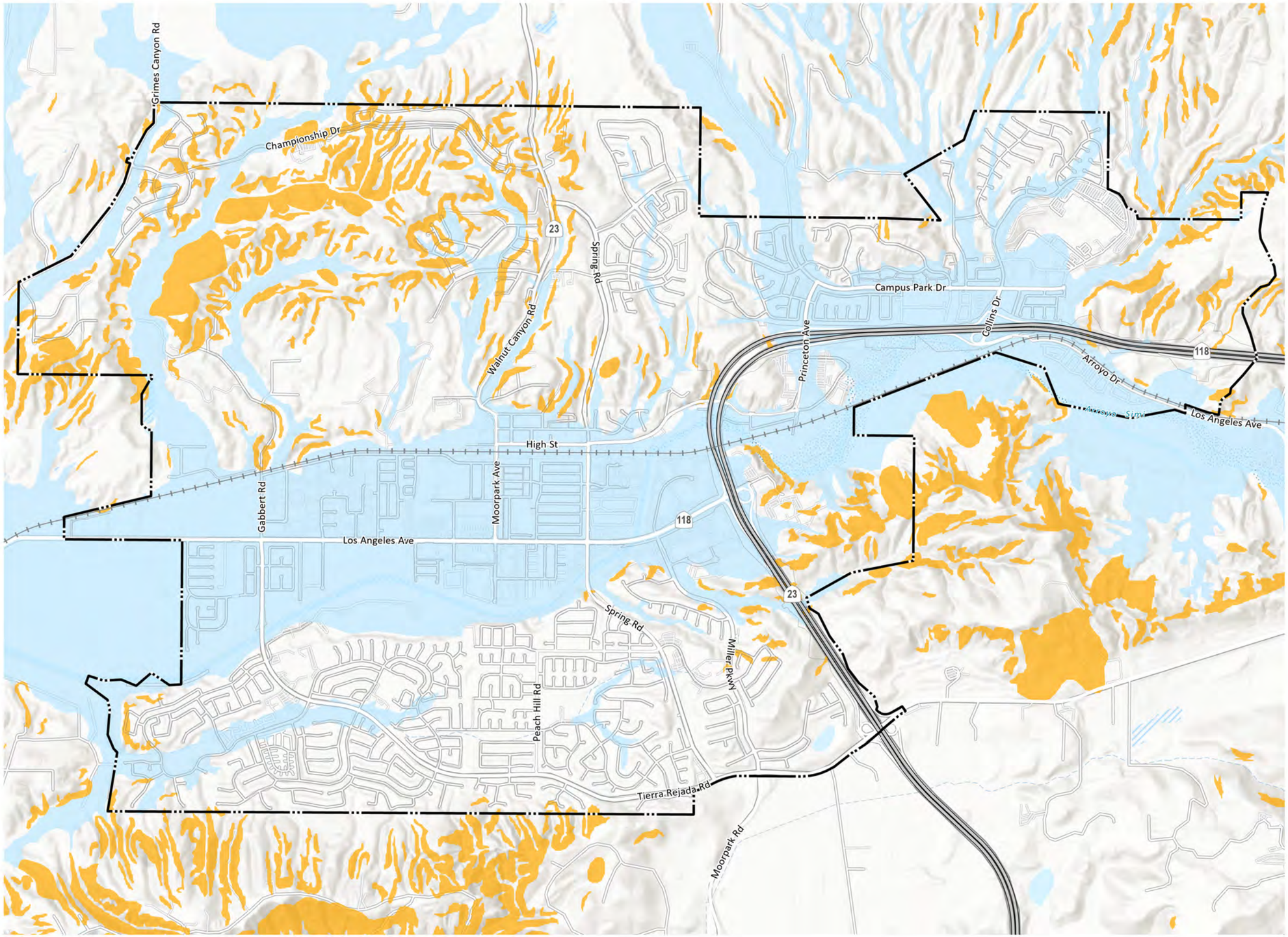
As shown in Figure 5.7-3, the northwestern part of the city and areas to the northeast of the city are in areas prone to earthquake-induced landslides. According to the California Geological Survey (formerly the Division of Mines and Geology), most development areas in Moorpark are in areas not classified for landslide susceptibility, and the northern and southern edges of the city have areas that are considered most susceptible or generally susceptible to landslides (CGS 2016a, 2016b).

Hazardous Buildings

The principal threat in an earthquake is the damage to buildings. Continuing advances in engineering design and building code standards over the past decade have greatly reduced the potential for collapse in an earthquake of most of our new buildings. However, many buildings were built before current earthquake design standards were incorporated into the building code. Several specific building types are a particular concern in this regard.

- **Unreinforced Masonry Buildings.** In the late 1800s and early 1900s, unreinforced masonry was the most common type of construction for larger downtown commercial structures and for multistory apartment and hotel buildings. These were recognized as a collapse hazard following the San Francisco earthquake of 1906 and are generally known to be the most hazardous buildings in an earthquake. Per Senate Bill 547, local jurisdictions are required to enact structural hazard reduction programs by inventorying pre-1943 unreinforced masonry buildings and developing mitigation programs to correct the structural hazards.

Figure 5.7-3
Seismic Hazard Zones



City Boundary
Earthquake-Induced Landslide Zones
Liquefaction Zones

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- **Precast Concrete Tilt-up Buildings.** This building type was introduced after World War II and gained popularity in light industrial buildings during the late 1950s and 1960s. Extensive damage to concrete tilt-up buildings in the 1971 San Fernando earthquake revealed the need for better anchoring of walls to the of, floor, and foundation elements of the building and for stronger roof diaphragms.[1] In the typical damage to these buildings, the concrete wall panels would fall outward and the roof would collapse.

- **Soft-Story Buildings.** Soft-story buildings are those in which at least one story, commonly the ground floor, has significantly less rigidity and/or strength than the rest of the structure. This can form a weak link in the structure unless special design features are incorporated to give the building adequate structural integrity. Typical examples of soft-story construction are buildings with glass curtain walls on the first floor only, or buildings placed on stilts or columns, leaving the first story open for landscaping, street-friendly building entry, parking, or other purposes. In the early 1950s to early 1970s, soft-story buildings were a popular construction style for low- and midrise concrete frame structures.

- **Nonductile Concrete Frame Buildings.** The brittleness of nonductile concrete frame buildings can result in major damage and even collapse under strong ground shaking. This type of construction, which generally lacks masonry shear walls, was common in the very early days of reinforced concrete buildings, and they continued to be built until the codes were changed to require ductility in the moment-resisting frame in 1973.

There were large numbers of these buildings built for commercial and light industrial use in California's older, densely populated cities. Although many of these buildings have four to eight stories, many are shorter. This category also includes one-story parking garages with heavy concrete roof systems supported by nonductile concrete columns.

The City of Moorpark inventoried unreinforced masonry buildings in the city and reported to the State Seismic Safety Commission in 2004 that there were seven such buildings in the city, two of which have been demolished, and the remainder are not considered historically significant (Seismic Safety Commission 2005).

Other Geologic Hazards

Ground Subsidence

Ground subsidence is the gradual settling or sinking of the ground surface with little or no horizontal movement, and most often results from human activities such as the extraction of oil, gas, or groundwater. Effects of subsidence include fissures, sinkholes, depressions, and disruption of surface drainage.

The abandoned Moorpark Oil Field is in the northern part of Moorpark, and the Moorpark West Oil Field is partially within the northwestern part of Moorpark and has only one active oil well outside of the city. Based on the lack of ongoing oil and gas extraction activities in the city, subsidence resulting from oil and gas extraction is not a significant issue for Moorpark.

[1] A structural roof deck capable of resisting the stress produced by lateral forces, such as wind or seismic loads.

The city is above the East and South subbasins of the Las Posas Valley Groundwater Basin, from which groundwater has been extracted for decades. The city currently gets approximately 20 percent of its water from local wells (Ventura 2021). The thick alluvial deposits of the subbasin may be susceptible to compaction, with resulting subsidence at the surface, in the event of rapid groundwater withdrawal. Figure 5.7-4, *Subsidence Zones*, depicts areas in Moorpark that are susceptible to subsidence.

Surface subsidence of up to five feet from groundwater production have been reported in the Las Posas Valley west of Moorpark. However, based on mapping and data compiled by the United States Geological Survey of basin compaction and subsidence between 1891 and 1993, Moorpark has only experienced a maximum of half a foot of subsidence on the western portion of the city (Hanson et al. 2003). The eastern portions of the city have not shown any evidence of subsidence in the same time period (Hanson et al. 2003). A GPS station in central Moorpark was reported to have experienced a 0.06-foot vertical displacement in elevation between 1999 and 2022 (California Department of Conservation 2022). Groundwater elevation trends observed in a groundwater well located near the western edge of Moorpark declined about 25 feet from 1927 to 1940, followed by a period of stability between 1940 and 1954 (Fox Canyon Groundwater Management Agency 2019). From 1977 to 1995, groundwater elevations rose about 45 feet due to increased runoff from development. The groundwater was then followed by a period of stability until 2002 when the well was no longer monitored. Other wells in the area indicate that groundwater elevations were stable between 2002 and 2014 in the area (Fox Canyon Groundwater Management Agency 2019). Pursuant to the Sustainable Groundwater Management Act of 2014, the Fox Canyon Groundwater Management Agency is responsible for monitoring subsidence and making adjustments to groundwater storage and pumping within the Las Posas Valley Groundwater Basin as needed to prevent future subsidence and fissuring.

Collapsible Soils

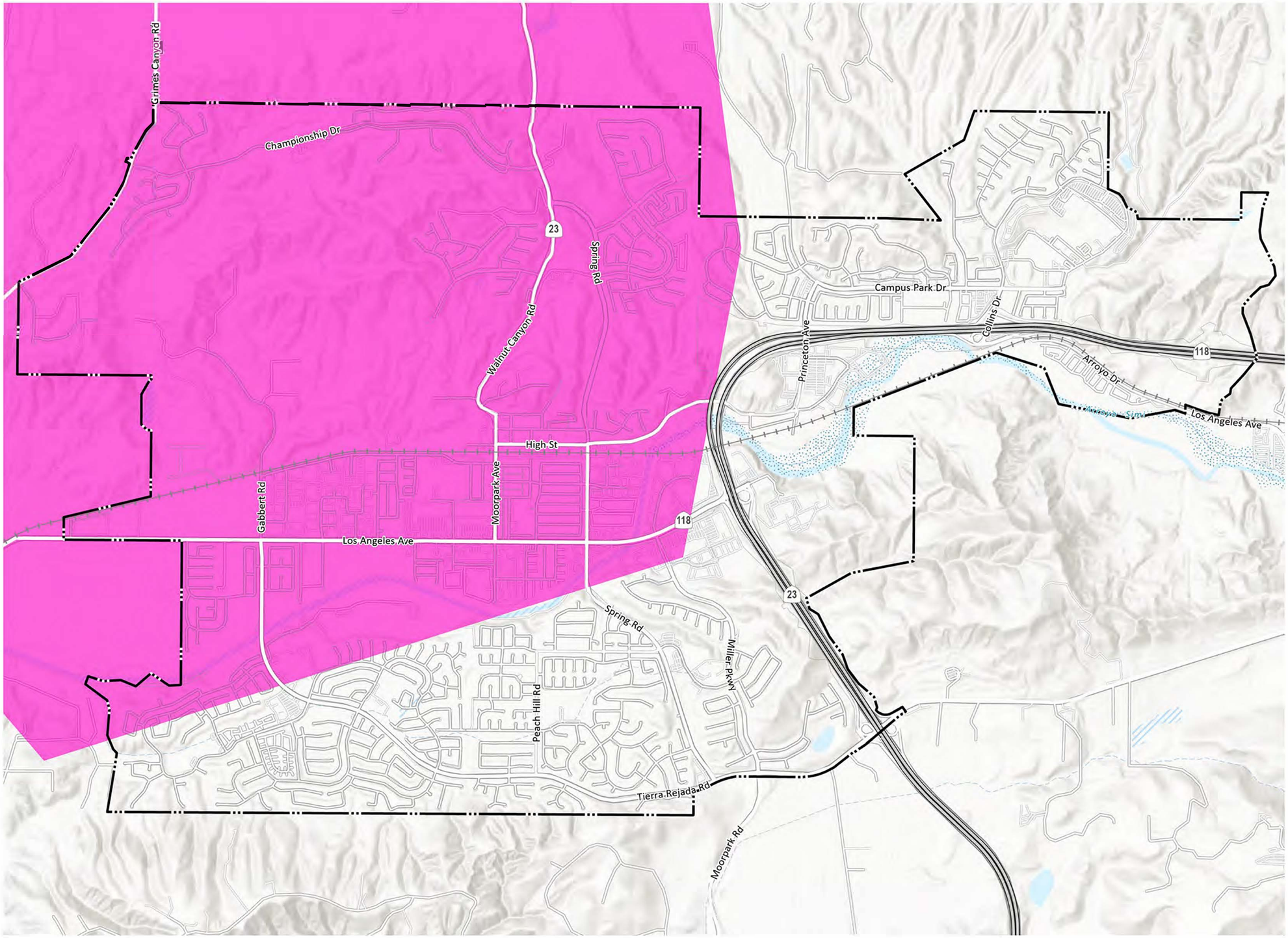
When collapsible soils become saturated, their grains rearrange and lose cohesion, causing rapid, substantial settlement under relatively light loads. Soils prone to collapse are generally young, deposited by flash floods or wind. Increased surface water infiltration, such as from irrigation or a rise in the groundwater table, combined with the weight of a building, can cause rapid settlement and cracking of foundations and walls. Dry, stiff silts with a high void ratio are especially susceptible to collapse. Most of the alluvium that underlies the Moorpark area is generally not susceptible to collapse due to the granular nature of the soils and the lack of clay needed to form dry bonds between grains.

Compressible Soils

Compressible soils are typically unconsolidated, low-density Holocene sediments that may compress under the weight of structures and fill soil. The young sediments underlying the valley portions of the city are generally dry and loose in the upper few feet and therefore susceptible to compression. Areas that have been intensely farmed, such as much of the valley portions of Moorpark, are especially susceptible to compression.

Figure 5.7-4

Subsidence Hazard Zones



City Boundary

Subsidence Hazard Area

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Expansive Soils

Soils containing expansive clay minerals can shrink or swell substantially as the moisture content decreases or increases. Structures built on these soils may experience shifting, cracking, and breaking damage as soils shrink and subside or expand. The near-surface sediments in the western and central parts of the city are composed primarily of granular soils, that is, silty sand, sand, and gravel. Such sediments are usually nonexpansive or have very low expansion potential. Expansive soils are more likely to be present in the southeastern parts of the city within the Las Posas Hills, where there are instances of Cibo, Cropley, and Diablo clays.

Erosion

Erosion is the movement of rock and soil due to water, wind, and gravity. Soil erosion may be a slow process that continues relatively unnoticed, or it may occur quickly, causing serious loss of topsoil. The rate and magnitude of soil erosion by water is controlled by rainfall intensity and runoff, soil texture and cohesion, slope gradient and length, and vegetation cover. The young alluvial sediment underlying the city is generally granular, poorly consolidated, and very susceptible to erosion. Grading can increase the potential for erosion by removing protective vegetation, changing natural drainage patterns, and constructing slopes.

Paleontological Resources

Paleontological resources are the fossilized remains of organisms from prehistoric environments found in geologic strata. These are valued for the information they yield about the history of the earth and its past ecological settings. There are two types of resources: vertebrate and invertebrate. These resources are found in geologic strata conducive to their preservation, typically sedimentary formations. Paleontological sites are areas that show evidence of prehuman activity. Often they are simply small outcroppings visible on the surface or sites encountered during grading. While the sites are important indications, it is the geologic formations that are the most important, since they may contain important fossils. Potentially sensitive areas for the presence of paleontological resources are based on the underlying geologic formation.

The oldest rocks within the city date to the Eocene and Oligocene epochs. Volcanism took place from 17 to 14 million years ago (Ma). Some of that volcanism was submarine. A relatively thin band of Monterey Formation sediments in the vicinity are evidence that the city was submerged during the Middle and Late Miocene Epoch (ECORP 2020). It had remerged by the Pliocene Epoch. Much of the city footprint is mapped as Saugus Formation, a terrestrial unit, which spans the late Pliocene to and early Pleistocene epochs, ending around 780 thousand years ago (Ka).

Stratigraphy

Late Eocene to Late Oligocene Deposits (~38 Ma to ~23 Ma)

Sespe Formation (Ts)

- The Sespe Formation has yielded a wealth of fossils in the Moorpark area. Caltech paleontologists began research in the area in the 1930s. In the hills just east of the northeastern portion of the city footprint are 27 localities from the older Eocene portion of the Sespe Formation. Vertebrate fossils found there

include insectivores, two types of primates, rodents, miacid carnivores, protoceratids, and camels. A list of all the species from those localities is included in *Summary of Paleontological Findings, Moorpark General Plan Update,* ECORP Consulting, September 2022. A complete copy of this study is included as Appendix G of this DEIR. In the Las Posas Hills west-southwest of the city footprint is a very well-known Sespe Formation locality of Oligocene age. The holotype (name bearing) specimens alone from that locality include the fossil tortoise *Gopherus neglectus*, the fossil dogs *Archaeocyon pavidus* and *Mesocyon baileyi*, the fossil cats *Hoplophoneus belli* and *Nimravus meridianus*, the fossil rodent *Sespemys thurstoni*, the fossil rhinoceros *Subhyracodon kewi*, the fossil hypertragulid artiodactyl *Hypertragulus fontanus*, and the fossil camel *Dyseotylopus migrans*.

Middle Miocene Volcanic Deposits (~17 Ma to ~14 Ma)

Conejo Volcanics (Tco)

These volcanic deposits will not produce paleontological resources (fossils).

Late Pliocene to Early Pleistocene (~3.6 Ma to ~1.8 Ma)

Saugus Formation (QTs)

The Saugus Formation is an accumulation of fluvial and alluvial fan sediment. Until recently, some marine sediments were also considered part of the formation. However, marine strata formerly assigned to it are now assigned to the Pico Formation.

Late Pleistocene (~1 Ma to ~11.7 Ka)

Old Alluvial Fan Deposits (Qof)

There are considerable exposures of older Quaternary Alluvium in the proposed project area, frequently as fan deposits along the margins of the elevated terrain, and particularly south of Arroyo Simi in the southwestern portion of the proposed project area. There are no known localities in this unit within the city boundaries. The closest vertebrate fossil locality from these older Quaternary deposits is in the Las Posas Hills just south of due west of the southwesternmost portion of the city footprint. It produced a fossil specimen of horse, *Equus*. The next closest older Quaternary locality is due east of the northeastern portion of the city footprint on the south side of Alamos Canyon, which also produced a fossil specimen of horse, *Equus occidentalis*. In the ravine west of Dry Canyon further east, another locality produced a fossil skeleton of mastodon, *Mammut americanum*. At Marr Ranch in the very northeastern part of Simi Valley, another older Quaternary locality produced another fossil specimen of mastodon, *Mammut*.

Modern

Very Young Wash Deposits (Qw), Alluvium, undifferentiated (Qa), Young Alluvial Valley Deposits (Qya)

Sediments from the Holocene Epoch (~11.7 Ka to present) are mostly alluvium of existing arroyos and scree, soils, or other materials that are primarily found at the base of hills. Historically, Holocene fossils have not been considered significant paleontological resources. However, the Guidelines of the Society for Vertebrate Paleontology (2010) indicate that paleontological resources are considered older than recorded human history and/or older than middle Holocene (i.e., older than about 5,000 radiocarbon years). Surficial

sediments of many kinds are found within the city footprint. Only those older than 5,000 radiocarbon years will produce significant paleontological resources. However, any of the above fossil-producing rock units could be exposed at the surface and yield significant paleontological resources at the surface. In the active channel of Arroyo Simi that flows through the central portion of the area are surface deposits of younger Quaternary gravels. Surface deposits in all the lower lying terrain in the proposed project area, especially in Little Simi Valley and in all drainages in the more elevated terrain, there are surface deposits of younger Quaternary Alluvium, derived as alluvial fan deposits from the surrounding more elevated terrain or as alluvial deposits from the Arroyo Simi drainage. These younger Quaternary deposits typically do not contain significant vertebrate fossils in the uppermost layers, but older sedimentary deposits found at depth may well contain significant fossil vertebrate remains.

Paleontological Records Search

Much of the known fossil collections known from Moorpark and adjacent areas are of Pleistocene age. Fossils have been recovered from the Moorpark Highlands Project and the Meridian Hills neighborhood.

The Santa Barbara Natural History Museum has 34 specimen numbers in its collection from the Saugus Formation in the Meridian Hills neighborhood. Included in this collection are horses, camels, mammoth, gopher, pocket mouse, kangaroo rat, harvest mouse, wood rat, and vole. Numerous vertebrate fossils were recovered from the Saugus Formation for the Meridian Hills neighborhood. Twenty-one localities were recorded within the footprint of that project. Two species of mammoth, *Mammuthus meridionalis* and *Mammuthus columbi*, were identified as being present. This was one of only three known co-occurrences of these two species. A combination of the paleomagnetic studies at the site and the co-occurrence of these two mammoths permitted an age estimate of 850 Ka to 780 Ka for this fauna.

Another development known as Moorpark Highlands produced vertebrate fossils, and it lies farther to the northeast, across Walnut Canyon Road. A collection of mollusk fossils was obtained from the Pico Formation, and several vertebrate fossils, including a partial skeleton of a mastodon, *Mammut* sp., from the Saugus Formation. Fossils of horse, *Equus*, were also recovered.

Paleontological Sensitivity

A multilevel ranking system was developed by professional resource managers within the U.S. Bureau of Land Management as a practical tool to assess the sensitivity of sediments for fossils. The Potential Fossil Yield Classification (PFYC) system has a multilevel scale based on demonstrated yield of fossils. The PFYC system provides additional guidance regarding assessment and management for different fossil yield rankings. Fossil resources occur in geologic units (e.g., formations or members). The probability for finding significant fossils in a project area can be broadly predicted from previous records of fossils recovered from the geologic units present in and/or adjacent to the city. The geological setting and the number of known fossil localities help determine the paleontological sensitivity according to PFYC criteria. Sediments that are close to their basement rock source are typically coarse; those farther from the basement rock source are finer. The chance of fossils being preserved greatly increases once the average size of the sediment particles is reduced to 5 millimeters or less in diameter. Moreover, fossil preservation also greatly increases after natural burial in rivers, lakes, or oceans. Remains left on the ground surface become weathered by the sun or consumed by

scavengers and bacterial activity, usually within 20 years or less. Therefore, the sands, silts, and clays of rivers, lakes, and oceans are the most likely sediments to contain fossils.

Using the PFYC system, geologic units are classified according to the relative abundance of vertebrate fossils or scientifically significant invertebrate or plant fossils and their sensitivity to adverse impacts within the known extent of the geological unit. Although significant localities may occasionally occur in a geologic unit, a few widely scattered important fossils or localities do not necessarily indicate a higher PFYC value; instead, the relative abundance of localities is intended to be the major determinant for the value assignment. Figure 5.7-5, *Paleontological Sensitivity,* serves as a model for predicting the types of paleontological resources that may be expected within Moorpark. No formations in the city are assigned a very high sensitivity (PFYC 5). The late Eocene to late Oligocene Sespe Formation and Late Pliocene to Early Pleistocene Saugus Formation are assigned a high sensitivity (PFYC 4). Alluvial sediments are assigned a low sensitivity (PFYC 2). The Conejo Volcanics are assigned very low sensitivity (PFYC 1).

5.7.2 Thresholds of Significance

According to Appendix G of the CEQA Guidelines, a project would normally have a significant effect on the environment if the project would:

G-1 Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:

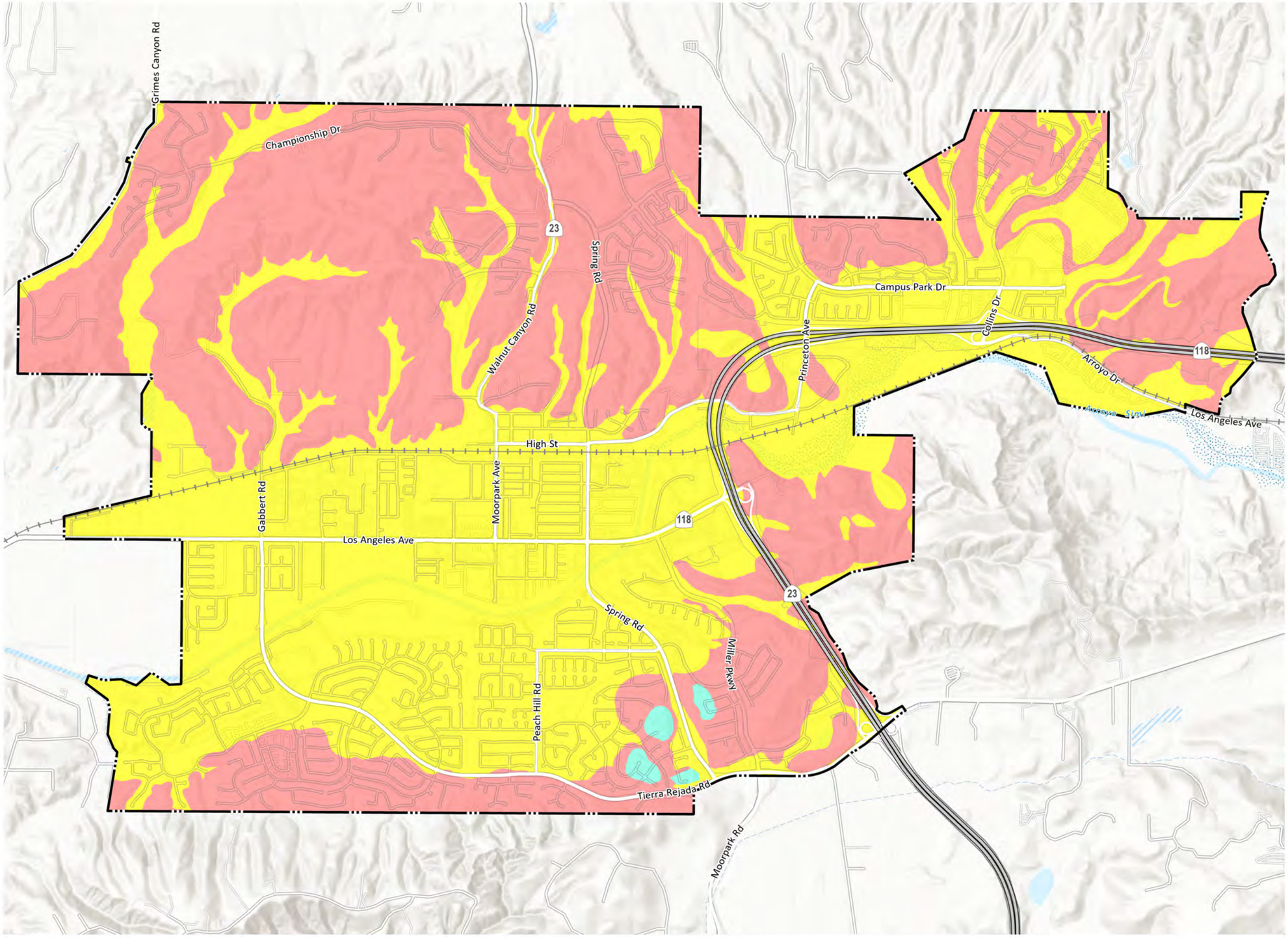
- i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault. (Refer to Division of Mines and Geology Special Publication 42.)
- ii) Strong seismic ground shaking.
- iii) Seismic-related ground failure, including liquefaction.
- iv) Landslides.

G-2 Result in substantial soil erosion or the loss of topsoil.

G-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 off-site landslide, lateral spreading, subsidence, liquefaction, or collapse.

Figure 5.7-5

Paleontological Sensitivity



City Boundary

Paleontological Sensitivity

- PFYC 1
- PFYC 2
- PFYC 4

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

G-5 Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water.

G-6 Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

5.7.3 Environmental Impacts

5.7.3.1 IMPACT ANALYSIS

The applicable thresholds are identified in brackets after the impact statement.

Impact 5.7-1: Moorpark residents [or occupants, visitors, etc.] would be subject to potential seismic-related hazards; however, development associated with the Moorpark General Plan 2050 would adhere to existing structural safety requirements. [Threshold G-1i, G-1ii, G-1iii, and G-1iv])

The location and underlying geology in Moorpark make it likely to experience seismic hazards, including strong seismic ground shaking, and secondary hazards, like liquefaction.

Earthquake Faults

As described in Section 5.7.1.2, *Existing Conditions*, an active surface fault is mapped and zoned under the AP Zoning Act in Moorpark. The Simi-Santa Rosa Fault is included in AP Zones in Moorpark. Moorpark Municipal Code Title 15, Chapter 15.08 incorporates and adopts the California Building Code. Chapter 1803.7 of the CBC requires that all projects within AP Zones consider the California Geological Survey's Special Publication 42, "Fault Rupture Hazards in California," and that all conclusions be fully supported by satisfactory data and analysis (CGS 2018). Such mandatory compliance would reduce hazards arising from fault rupture to less than significant.

Strong Seismic Ground Shaking

Ground shaking is responsible for most of the damage from earthquakes and can damage or destroy buildings, structures, pipelines, and infrastructure. The intensity of shaking depends on the type of fault, distance to the epicenter, magnitude of the earthquake, and subsurface geology. The Simi-Santa Rosa, Oak Ridge, and San Andreas faults are potentially capable of producing the most intense ground accelerations. The seismic design of buildings in the plan area is governed by the requirements of the most recent CBC. The CBC has been accepted as the basic design standard in Moorpark. All structures that would be constructed pursuant to the proposed Moorpark General Plan 2050 would be designed to meet or exceed current design standards in the latest CBC. Therefore, new structures are expected to remain standing but may suffer damage requiring closure and replacement. These project design measures would reduce the exposure of people and structures to harm from strong ground shaking hazards, and there would not be a significant impact.

Seismic-Related Ground Failure

Secondary effects of earthquakes are nontectonic processes such as ground deformation, including fissures, settlement, displacement, and loss of bearing strength, and are the leading causes of damage to structures during a moderate to large earthquake. Secondary effects could lead to ground deformation such as liquefaction, lateral spreading, seismically induced landslides, and ground lurching.

Based on the potential for strong ground shaking combined with a groundwater depth of less than 50 feet in parts of the plan area, much of the city is susceptible to liquefaction. All potential future structures in Moorpark would be constructed in accordance with current seismic design standards of the CBC. Design measures would be implemented according to the most recent CBC, which would reduce the impact of liquefaction and seismic settlement, would include but not limited to ground improvement techniques, such as in-situ densification; load transfer to underlying nonliquefiable bearing layers; and over-excavation and recompaction with engineered fill. These design measures would reduce the potential exposure of people and structures to the hazards from liquefaction and seismic settlement such that there would not be a significant impact.

Landslides

Marginally stable slopes (including existing landslides) may be subject to landslides caused by earthquakes. The landslide hazard depends on many factors, including existing slope stability, shaking potential, and presence of existing landslides. Landslides, debris flows, or any movement of earth or rock are most common in areas of high topographic relief, such as steep canyon walls or steep hillsides. There are existing landslides in Moorpark as depicted on Figure 5.7-1, *Geologic Map*, and areas where earthquake-induced landslides are a potential hazard are depicted on Figure 5.7-3, *Seismic Hazard Zones in Moorpark*. The Moorpark Municipal Code Chapter 17.38, Hillside Management, describes special requirements for all grading and construction in hillside areas to prevent landslides. There would not be a significant impact from slope instability.

Summary

The proposed Land Use, Open Space, Parks and Recreation, and Safety Elements have goals, policies, and actions that require local planning and development decisions to consider potential impacts to the risk of loss, injury, or death as a result of earthquakes. The following policies, once adopted, would serve to minimize potential adverse impacts from earthquakes.

Land Use Element

- **Policy LU-1.6 Development priorities.** Prioritize infill and redevelopment of existing developed areas and immediately adjoining properties to achieve a seamless and connected development pattern, limiting expanded development outward into hillsides and natural areas.

- **Policy LU-7.1 Mitigate environmental impacts.** Locate and design new development to minimize adverse visual and/or environmental impacts to the community.

- **Policy LU-7.2 Design development to respect natural setting.** Require that new development respect, integrate with, and complement the natural features of the land including conforming building massing to topographic forms, restricting grading of steep slopes and encouraging the preservation of ridgelines and significant hillsides as prominent visual features.

- **Policy LU-7.3 Protect uses from hazards.** Require that new development be located and designed to avoid or mitigate any potentially hazardous conditions.

- **Policy LU-8.9 Design to avoid hazards.** Require that development in significant hazard areas is located and designed to ensure safety in accordance with the Safety Element.

Open Space, Parks, and Recreation Element

- **Policy OSPR-1.10 Properties unsuitable for development.** Promote the use of the properties unsuitable for development due to hazards or other safety constraints (as defined by the Safety Element) for recreation uses provided that they can be safely integrated and do not require infrastructure (e.g., hiking, fishing, bike riding).

Safety Element

- **Policy SE-1.15 Hazard mapping.** Update hazard mapping with each update to the Safety Element, or earlier if new information becomes available, to ensure the City relies on best available hazard mapping to inform decisions.

- **Policy SE-2.1 California Building Standards Code.** Continue to implement California Building Standards Code seismic safety standards for construction of new buildings.

- **Policy SE-2.2 Geologic studies.** Require the preparation of detailed geologic studies for new development within seismic and geologic hazard zones.

- **Policy SE-2.3 Unreinforced masonry buildings.** Require existing unreinforced masonry buildings to be seismically retrofitted, based on an engineering evaluation, if deemed unsafe by a building official.

- **Policy SE-2.4 Earthquake preparedness.** Participate in local, county, and State-sponsored earthquake preparedness programs.

- **Policy SE-2.5 New development.** Require new development to comply with current state, regional, and local requirements for seismic and geologic safety.

- **Policy SE-2. Slope stability analysis.** Require that slope stability analyses be conducted for new development in hillside areas and compliance with Section 17.38, Hillside Management, of the Moorpark Municipal Code.

- **Policy SE-2.7 Subsidence risk reduction coordination.** Coordinate with Ventura County Resource Management Agency to participate in regional measures that reduce risk of subsidence in the City of Moorpark and surrounding areas.
- **Policy SE-2.8 Critical and lifeline facility operations.** Assess critical and lifeline facilities for seismic safety and earthquake performance to ensure they remain operational after a seismic event.

Implementation of the above goals and policies of the Moorpark General Plan 2050, as well as compliance with State, regional, and local regulations pertaining to structural safety regarding fault rupture, ground shaking, liquefaction, and landslides, would ensure that potential future development that results from implementation of the proposed project would not directly or indirectly cause substantial adverse effects, including the risk of loss, injury, or death. Therefore, impacts would be less than significant.

Level of Significance Before Mitigation: Less than significant.

Impact 5.7-2: Unstable geologic units or soils conditions, including soil erosion, could result from development associated with the Moorpark General Plan 2050; however, such development would adhere to existing regulatory requirements. [Thresholds G-2 and G-3]

Soils are particularly prone to erosion during the grading phase of development, especially during heavy rains. Substantial soil erosion or the loss of topsoil during construction of future development could undermine structures or minor slopes, which would be a concern during implementation of the proposed project.

The CBC provides regulations for construction to provide proper grading, drainage, and erosion and sediment control. In addition, municipal code Chapter 8.52.050, Development, requires all development to be undertaken in accordance with any conditions and requirements established by an applicable NPDES permit, the preparation of a stormwater pollution prevention plan and a stormwater pollution control plan. Erosion control measures can include seeding slopes, installation of temporary dikes and swales, placement of straw bales and filter fences, outlet protection, grass-lined swales, and installation of sediment retention structures, as appropriate for specific sites.

As described further in Section 5.10 of this Draft EIR, *Hydrology and Water Quality*, to minimize potential impacts related to erosion, future development pursuant to the proposed project would require compliance with the Construction General Permit (CGP) 2009-0009-DWQ, as amended by 2010-0014-DWQ and 2012-0006-DWQ. Under the terms of the permit, applicants must file Permit Registration Documents with the State Water Resources Control Board (SWRCB) prior to the start of construction that include a Notice of Intent, risk assessment, site map, SWPPP, annual fee, and a signed certification statement. The documents are submitted electronically to the SWRCB via the Stormwater Multiple Application and Report Tracking System website. On July 22, 2022, the SWRCB issued a draft of the revised Statewide CGP that, when approved, will supersede Order 2009-0009-DWQ and its amendments.

Applicants must also demonstrate conformance with applicable BMPs and prepare a SWPPP containing a site map that shows the construction site perimeter, existing and proposed buildings, lots, roadways, stormwater collection and discharge points, general topography both before and after construction, and

drainage patterns across the Project Area. The SWPPP must list BMPs that would be implemented to prevent soil erosion and discharge of construction-related pollutants that could contaminate nearby water resources. Additionally, the SWPPP must contain a visual monitoring program for all risk levels and a stormwater sampling and analysis program for Risk Levels 2 and 3. While this regulation is primarily aimed at water quality, it is another mechanism routinely applied by the City that would help to minimize the risk of erosion.

Adherence to existing regulatory requirements that include, but are not limited to, the CBC and the municipal code's grading and drainage requirements for new developments, would ensure that impacts associated with substantial erosion and loss of topsoil from potential future development would be less than significant and no mitigation measures are required.

Level of Significance Before Mitigation: Less than significant.

Impact 5.7-3: Soil conditions in Moorpark could result in risks to life or property; however, development associated with the Moorpark General Plan 2050 would be required to comply with existing regulations. [Thresholds G-3 and G-4]

Unstable geologic units are known to be present within Moorpark. The following sections discuss the hazards associated with landslides, lateral spreading, subsidence, liquefaction, or collapse.

Landslides

As stated in Impact 5.7-1, there are localized substantial hazards with respect to slope stability in Moorpark. However, implementation of the goals and policies listed in GEO-1 as well as compliance with State, regional, and local regulations pertaining to structural safety regarding landslides would ensure that potential future development that results from implementation of the proposed project would not directly or indirectly cause substantial adverse effects, including the risk of loss, injury, or death. There would not be a significant impact from slope stability.

Subsidence

Minor subsidence has been historically documented in Moorpark and is considered a potential hazard. Historically, subsidence in Moorpark does not show a pattern of widespread irreversible permanent lowering of the ground surface. The probability of subsidence impacts is generally low in Moorpark due to the lack of prominent geologic structures or contacts. As described further in Section 5.10, *Hydrology and Water Quality*, the Sustainable Groundwater Management Act encourages sustainable groundwater management practices to reduce the potential for future land subsidence, and ongoing surveying of the ground surface by the California Department of Water Resources and the United States Geological Survey provides a way to verify that efforts in preventing subsidence are effective. The groundwater recharge programs within the Fox Canyon Groundwater Management Agency's existing Groundwater Sustainability Plan for the Las Posas Valley Basin continue to prevent long-term groundwater overdraft conditions and reduce the impact of subsidence to less than significant.

Expansive Soils

There is a potential for expansive soils in the southeastern parts of the city in the Las Posas Hills, where there are instances of Cibo, Cropley, and Diablo clays (USDA 2022). Expansive soils are possible wherever clays and elastic silts may be present, including alluvial soils and weathered granitic and fine-grained sedimentary rocks. The presence of expansive soils represents a hazard to structures and people.

The CBC has been adopted by the City and requires that structures be designed to mitigate expansive soils. Methods that could be used to reduce the impact of expansive soils include drainage control devices to limit water infiltration near foundations, over-excavation and recompaction of engineered fill method, or support of the foundation with piles. These project design measures or a combination of them will reduce the impact of expansive soils to less than significant.

Liquefaction and Lateral Spreading

As stated in Impact 5.7-1, based on the potential for strong ground shaking combined with a groundwater depth of under 50 feet in parts of Moorpark, much of Moorpark is within an area susceptible to liquefaction. All structures constructed in Moorpark would be designed in accordance with current seismic design standards, as found in the CBC. Design measures would be implemented according to the most recent CBC, which would reduce the impact of liquefaction and seismic settlement, including, but not limited to, ground improvement techniques such as in-situ densification, load transfer to underlying nonliquefiable bearing layers, and over-excavation and recompaction with engineered fill method. These design measures would reduce the potential exposure of people and structures to the hazard from liquefaction and seismic settlement such that there would not be a significant impact. In addition, based on the lack of a free face (i.e., cliffside escarpment), there would not be a significant impact from ground lurching or lateral spreading.

Settlement and Collapse

Settlement and collapse are likely to exist in areas with alluvial soils. Areas of large settlement can damage, or in extreme cases, destroy structures. The presence of compressible soils in Moorpark represents a hazard to structures and people.

The CBC has been adopted by the City and requires that structures be designed to mitigate compressible soils. Methods that could be used to reduce the impact of compressible soils include in-situ densification, transferring the load to underlying non-compressible layers with piles, and over-excavation of compressible soil and recompaction with engineered fill. These design measures or a combination of them would reduce the impact of compressible soils to less than significant.

Summary

As determined in Impacts 5.7-1 and 5.7-2, future development from implementation of the Moorpark General Plan 2050 would be required to comply with the CBC, which provides regulations for building design and construction to ensure geologic and soil stability. In addition to protections afforded by State laws, General Plan goals and policies listed under Impact 5.7-1 would require local planning and development decisions to consider potential risks of development on unstable soils or geologic units. Policies listed in

Impact 5.7-1 specifically address the early review of potential future development to identify where there is a potential danger from geologic hazards.

All potential future development from implementation of the proposed project would be required to comply with State and local regulations, including municipal code provisions and Moorpark General Plan 2050 goals and policies that minimize impacts related to unstable geologic units and soils where landslide, lateral spreading, subsidence, liquefaction, or collapse could occur in Moorpark. Implementation of the above goals and policies, as well as compliance with State, regional, and local regulations pertaining to structural safety regarding a geologic unit or soils that are unstable and could result in landslides, lateral spreading, subsidence, liquefaction, or collapse, would ensure that potential future development that results from implementation of the proposed project would not directly or indirectly cause substantial adverse effects. Therefore, impacts would be less than significant and no mitigation is required.

Level of Significance Before Mitigation: Less than significant.

Impact 5.7-4: Sewer flows from new development associated with buildout of the Moorpark General Plan 2050 would be sewered by the Ventura County Waterworks District No. 1. [Threshold G-5]

Wastewater from Moorpark is treated at wastewater treatment facilities owned and operated by the Ventura County Waterworks District No. 1. Use of septic tanks would be limited to existing septic tanks, and new septic tanks would be constricted to areas not in practical proximity to existing sewer mains, dependent on approval by the Los Angeles Regional Water Quality Control Board on a case-by-case basis. State regulations would ensure that the potential impacts from soil conditions would be less than significant, and no mitigation measures are required.

Level of Significance Before Mitigation: Less than significant.

Impact 5.7-5: Future development that would be accommodated by the Moorpark Park General Plan 2050 could impact known and unknown paleontological resources. [Threshold G-6]

As discussed in Section 5.7.1.2, fossil localities have been found in the vicinity of Moorpark. Figure 5.7-4 shows the paleontological sensitivity of the geological units within Moorpark. Paleontological resources are recognized as nonrenewable and therefore, receive protection under the California Public Resources Code and CEQA. The Moorpark General Plan 2050 Conservation Element includes the following policies that would reduce impacts to paleontological resources:

- **Policy COS-3.5 Paleontological and archaeological resources.** Require new development to protect and preserve paleontological and archaeological resources from destruction, and avoid and minimize impacts to such resources in accordance with the requirements of CEQA.
- **Policy COS-3.6 Open space resource protection.** Explore acquisition of new open space areas, including privately owned parcels located adjacent to or within recognized historical, cultural, archaeological, and paleontological resources.

However, long-term implementation of the Moorpark General Plan 2050 land use plan could allow development (e.g., infill development, redevelopment, and revitalization/restoration), including grading, of known and unknown sensitive areas. Grading and construction activities of undeveloped areas or redevelopment that requires more intensive soil excavation than in the past could potentially disturb paleontological resources. Therefore, future development that would be accommodated by the Moorpark General Plan 2050 could potentially unearth previously unrecorded resources, and impacts are potentially significant.

Level of Significance Before Mitigation: Potentially significant.

5.7.4 Relevant General Plan Policies

5.7.4.1 GEOLOGIC HAZARDS

Land Use Element

- **Policy LU-1.6 Development priorities.** Prioritize infill and redevelopment of existing developed areas and immediately adjoining properties to achieve a seamless and connected development pattern, limiting expanded development outward into hillsides and natural areas.

- **Policy LU-7.1 Mitigate environmental impacts.** Locate and design new development to minimize adverse visual and/or environmental impacts to the community.

- **Policy LU-7.2 Design development to respect natural setting.** Require that new development respect, integrate with, and complement the natural features of the land including conforming building massing to topographic forms, restricting grading of steep slopes and encouraging the preservation of ridgelines and significant hillsides as prominent visual features.

- **Policy LU-7.3 Protect uses from hazards.** Require that new development be located and designed to avoid or mitigate any potentially hazardous conditions.

- **Policy LU-8.9 Design to avoid hazards.** Require that development in significant hazard areas is located and designed to ensure safety in accordance with the Safety Element.

Open Space, Parks and Recreation Element

- **Policy OSPR-1.10 Properties unsuitable for development.** Promote the use of the properties unsuitable for development due to hazards or other safety constraints (as defined by the Safety Element) for recreation uses provided that they can be safely integrated and do not require infrastructure (e.g., hiking, fishing, bike riding).

Safety Element

- **Policy SE-1.15 Hazard mapping.** Update hazard mapping with each update to the Safety Element, or earlier if new information becomes available, to ensure the City relies on best available hazard mapping to inform decisions.

- **Policy SE-2.1 California Building Standards Code.** Continue to implement California Building Standards Code seismic safety standards for construction of new buildings.

- **Policy SE-2.2 Geologic studies.** Require the preparation of detailed geologic studies for new development within seismic and geologic hazard zones.

- **Policy SE-2.3 Unreinforced masonry buildings.** Require existing unreinforced masonry buildings to be seismically retrofitted, based on an engineering evaluation, if deemed unsafe by a building official.

- **Policy SE-2.4 Earthquake preparedness.** Participate in local, county, and State-sponsored earthquake preparedness programs.

- **Policy SE-2.5 New development.** Require new development to comply with current state, regional, and local requirements for seismic and geologic safety.

- **Policy SE-2.6 Slope stability analysis.** Require that slope stability analyses be conducted for new development in hillside areas and compliance with Section 17.38, Hillside Management, of the Moorpark Municipal Code.

- **Policy SE-2.7 Subsidence risk reduction coordination.** Coordinate with Ventura County Resource Management Agency to participate in regional measures that reduce risk of subsidence in the City of Moorpark and surrounding areas.

- **Policy SE-2.8 Critical and lifeline facility operations.** Assess critical and lifeline facilities for seismic safety and earthquake performance to ensure they remain operational after a seismic event.

5.7.4.2 PALEONTOLOGICAL RESOURCES

Conservation Element

- **Policy COS-3.5 Paleontological and archaeological resources.** Require new development to protect and preserve paleontological and archaeological resources from destruction, and avoid and minimize impacts to such resources in accordance with the requirements of CEQA.

- **Policy COS-3.6. Open space resource protection.** Explore acquisition of new open space areas, including privately owned parcels located adjacent to or within recognized historical, cultural, archaeological, and paleontological resources.

5.7.5 Level of Significance Before Mitigation

Upon implementation of regulatory requirements and standard conditions of approval, some impacts would be less than significant: 5.7-1, 5,7-2, 5.7-3, and 5.7-4.

Without mitigation, this impact would be **potentially significant**:

- **Impact 5.7-5** Future development that would be accommodated by the Moorpark Park General Plan 2050 could impact known and unknown paleontological resources.

5.7.6 Mitigation Measures

Impact 5.7-5

GEO-1 **Paleontological Resources Monitoring and Mitigation.** In areas designated "high" or "low" sensitivity for paleontological resources, the project applicant shall be required to submit a Paleontological Resources Monitoring and Mitigation Plan (PRMMP). The PRMMP shall be prepared by a Qualified Paleontologist meeting the standards of Society of Vertebrate Paleontology (2010). The plan shall address specifics of monitoring and mitigation based on the project area and project's construction plan, and shall take into account updated geologic mapping, geotechnical data, updated paleontological records searches, and changes to the regulatory framework at the time of analysis. The PRMMP shall be submitted to the City of Moorpark prior to approval of a grading permit.

GEO-2 **High Sensitivity.** Projects involving ground disturbances in previously undisturbed areas mapped as having "high" paleontological sensitivity shall be monitored by a qualified paleontological monitor on a full-time basis. Monitoring shall include inspection of exposed sedimentary units during active excavations within sensitive geologic sediments. The monitor shall have authority to temporarily divert activity away from exposed fossils to evaluate the significance of the find and, if the fossils are determined to be significant, professionally and efficiently recover the fossil specimens and collect associated data. The paleontological monitor shall use field data forms to record pertinent location and geologic data, measure stratigraphic sections (if applicable), and collect appropriate sediment samples from any fossil localities.

GEO-3 **Low Sensitivity**. Projects involving ground disturbance in previously undisturbed areas mapped with "low" paleontological sensitivity shall require monitoring if construction activity exceeds the depth of the low-sensitivity surficial sediments. The underlying sediments may have high sensitivity; therefore, work in those units shall require paleontological monitoring, as designated by the qualified paleontologist in the Paleontological Resources Monitoring and Mitigation Plan.

GEO-4 **All Projects**. In the event of any fossil discovery, regardless of depth or geologic formation, construction work shall halt within a 50-foot radius of the find until its significance can be

determined by a qualified paleontologist. Significant fossils shall be recovered, prepared to the point of curation, identified by qualified experts, listed in a database to facilitate analysis, and deposited in a designated paleontological curation facility in accordance with the standards of the Society of Vertebrate Paleontology (2010). A regional repository shall be identified by the City Council and a curatorial arrangement shall be signed prior to collection of the fossils.

5.7.7 Level of Significance After Mitigation

Impact 5.7-5

Mitigation Measures GEO-1 through GEO-4 prescribe requirements for monitoring based on the sensitivity of sites for paleontological resources. Under GEO-1, areas that range from high to low sensitivity are required to prepare a Paleontological Resources Monitoring and Mitigation Plan. With adherence to mitigation measures GEO-1 through GEO-4, Impact 5.7-5 would be less than significant.

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5.8 GREENHOUSE GAS EMISSIONS

This section of the Draft Environmental Impact Report (DEIR) evaluates the potential for implementation of the Moorpark General Plan 2050 (proposed project) to cumulatively contribute to greenhouse gas (GHG) emissions impacts. Because no single project is large enough to result in a measurable increase in global concentrations of GHG, climate change impacts of a project are considered on a cumulative basis. GHG emissions modeling for the proposed project is included in Appendix D of this DEIR. Transportation-sector impacts are based on trip generation and vehicle miles traveled, as provided by Iteris (see Appendix K).

Terminology

- **Greenhouse gases (GHG).** Gases in the atmosphere that absorb infrared light, thereby retaining heat in the atmosphere and contributing to a greenhouse effect.
- **Global warming potential (GWP).** Metric used to describe how much heat a molecule of a greenhouse gas absorbs relative to a molecule of carbon dioxide (CO_2) over a given period of time (20, 100, and 500 years). CO_2 has a GWP of 1.
- **Carbon dioxide-equivalent (CO_2e).** The standard unit to measure the amount of greenhouse gases in terms of the amount of CO_2 that would cause the same amount of warming. CO_2e is based on the GWP ratios between the various GHGs relative to CO_2.
- **$MTCO_2e$.** Metric ton of CO_2e.
- **$MMTCO_2e$.** Million metric tons of CO_2e.

5.8.1 Environmental Setting

5.8.1.1 GREENHOUSE GASES AND CLIMATE CHANGE

Scientists have concluded that human activities are contributing to global climate change by adding large amounts of heat-trapping gases, known as GHGs, to the atmosphere. The primary source of these GHGs is fossil fuel use. The Intergovernmental Panel on Climate Change (IPCC) has identified four major GHGs—water vapor, carbon dioxide (CO_2), methane (CH_4), and ozone (O_3)—that are the likely cause of an increase in global average temperatures observed in the 20th and 21st centuries. Other GHGs identified by the IPCC that contribute to global warming to a lesser extent are nitrous oxide (N_2O), sulfur hexafluoride (SF_6), hydrofluorocarbons, perfluorocarbons, and chlorofluorocarbons (IPCC 2001).[1,2] The major GHGs applicable to the proposed project are briefly described.

[1] Water vapor (H_2O) is the strongest GHG and the most variable in its phases (vapor, cloud droplets, ice crystals); however, water vapor is not considered a pollutant because it is considered part of the feedback loop rather than a primary cause of change.

- **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 respiration, and also as a result of other chemical reactions (e.g., manufacture of cement). Carbon dioxide is removed from the atmosphere (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. Methane emissions also result from livestock and other agricultural practices and from the decay of organic waste in landfills and water treatment facilities.

- **Nitrous oxide (N_2O)** is emitted during agricultural and industrial activities as well as during the combustion of fossil fuels and solid waste.

GHGs are dependent on the lifetime, or persistence, of the gas molecule in the atmosphere. Some GHGs have a stronger greenhouse effect than others. These are referred to as high GWP gases. The GWP of GHG emissions are shown in Table 5.8-1, *GHG Emissions and Their Relative Global Warming Potential Compared to CO_2*. The GWP is used to convert GHGs to CO_2-equivalence (CO_2e) to show the relative potential that different GHGs have to retain infrared radiation in the atmosphere and contribute to the greenhouse effect. For example, under IPCC's Fifth Assessment Report (AR5), GWP values for CH_4, 10 MT of CH_4 would be equivalent to 280 MT of CO_2.

Table 5.8-1 GHG Emissions and Their Relative Global Warming Potential Compared to CO_2

GHGs	Second Assessment Report (SAR) Global Warming Potential Relative to CO_2[1]	Fourth Assessment Report (AR4) Global Warming Potential Relative to CO_2[1]	Fifth Assessment Report (AR5) Global Warming Potential Relative to CO_2[1]
Carbon Dioxide (CO_2)	1	1	1
Methane (CH_4)[2]	21	25	28
Nitrous Oxide (N_2O)	310	298	265

Source: IPCC 1995, 2007, and 2013.
Notes: The IPCC published updated GWP values in its Fifth Assessment Report (AR5) that reflect new information on atmospheric lifetimes of GHGs and an improved calculation of the radiative forcing of CO_2. However, GWP values identified in AR4 are used by South Coast AQMD to maintain consistency in statewide GHG emissions modeling. In addition, the 2017 Scoping Plan Update was based on the GWP values in AR4.
1 Based on 100-year time horizon of the GWP of the air pollutant compared to CO_2.
2 The methane GWP includes direct effects and indirect effects due to the production of tropospheric ozone and stratospheric water vapor. The indirect effect due to the production of CO_2 is not included.

Human Influence on Climate Change

For approximately 1,000 years before the Industrial Revolution, the amount of GHGs in the atmosphere remained relatively constant. During the 20th century, however, scientists observed a rapid change in the

[2] Black carbon contributes to climate change both directly, by absorbing sunlight, and indirectly, by depositing on snow (making it melt faster) and by interacting with clouds and affecting cloud formation. Black carbon is the most strongly light-absorbing component of particulate matter (PM) emitted from burning fuels such as coal, diesel, and biomass. The share of black carbon emissions from transportation is dropping rapidly and is expected to continue to do so between now and 2030 as a result of California's air quality programs. The remaining black carbon emissions will come largely from woodstoves/fireplaces, off-road applications, and industrial/commercial combustion (CARB 2022). However, state and national GHG inventories do not include black carbon due to ongoing work resolving the precise global warming potential of black carbon. Guidance for CEQA documents does not yet include black carbon.

climate and the quantity of climate change pollutants in the Earth's atmosphere that is attributable to human activities. The amount of CO_2 in the atmosphere has increased by more than 35 percent since preindustrial times and has increased at an average rate of 1.4 parts per million per year since 1960, mainly due to combustion of fossil fuels and deforestation (IPCC 2007). These recent changes in the quantity and concentration of climate change pollutants far exceed the extremes of the ice ages, and the global mean temperature is warming at a rate that cannot be explained by natural causes alone. Human activities are directly altering the chemical composition of the atmosphere through the buildup of climate change pollutants (CAT 2006). In the past, gradual changes in the earth's temperature changed the distribution of species, availability of water, etc. However, human activities are accelerating this process so that environmental impacts associated with climate change no longer occur in a geologic time frame but within a human lifetime (IPCC 2007).

Like the variability in the projections of the expected increase in global surface temperatures, the environmental consequences of gradual changes in the Earth's temperature are hard to predict. Projections of climate change depend heavily upon future human activity. Therefore, climate models are based on different emission scenarios that account for historical trends in emissions and on observations of the climate record that assess the human influence of the trend and projections for extreme weather events. Climate-change scenarios are affected by varying degrees of uncertainty. For example, there are varying degrees of certainty on the magnitude of the trends for:

- Warmer and fewer cold days and nights over most land areas.
- Warmer and more frequent hot days and nights over most land areas.
- An increase in frequency of warm spells/heat waves over most land areas.
- An increase in frequency of heavy precipitation events (or proportion of total rainfall from heavy falls) over most areas.
- Larger areas affected by drought.
- Intense tropical cyclone activity increases.
- Increased incidence of extreme high sea level (excluding tsunamis).

Potential Climate Change Impacts for California

There is at least a greater than 50 percent likelihood that global warming will reach or exceed 1.5°C in the near-term, even for the very low GHG emissions scenario (IPCC 2022). Climate change is already impacting California and will continue to affect it for the foreseeable future. For example, the average temperature in most areas of California is already 1°F (~0.56°C) higher than historical levels, and some areas have seen average increases in excess of 2°F (~1.1°C) (CalOES 2020). The California Fourth Climate Change Assessment identifies the following climate change impacts under a business-as-usual scenario.

- Annual average daily high temperatures in California are expected to rise by 2.7°F by 2040, 5.8°F by 2070, and 8.8°F by 2100 compared to observed and modeled historical conditions. These changes are statewide averages. Heat waves are projected to become longer, more intense, and more frequent.
- Warming temperatures are expected to increase soil moisture loss and lead to drier seasonal conditions. Summer dryness may become prolonged, with soil drying beginning earlier in the spring and lasting longer into the fall and winter rainy season.
- High heat increases the risk of death from cardiovascular, respiratory, cerebrovascular, and other diseases.
- Droughts are likely to become more frequent and persistent through 2100[3].
- Climate change is projected to increase the strength of the most intense precipitation and storm events affecting California.
- Mountain ranges in California are already seeing a reduction in the percentage of precipitation falling as snow. Snowpack levels are projected to decline significantly by 2100 due to reduced snowfall and faster snowmelt.
- Marine layer clouds are projected to decrease, though more research is needed to better understand their sensitivity to climate change.
- Extreme wildfires (i.e., fires larger than 10,000 hectares or 24,710 acres) would occur 50 percent more frequently. The maximum area burned statewide may increase 178 percent by the end of the century.
- Exposure to wildfire smoke is linked to increased incidence of respiratory illness.
- Sea level rise is expected to continue to increase erosion of beaches, cliffs, and bluffs. (CalOES 2020)

Global climate change risks to California are shown in Table 5.8-2, *Summary of GHG Emissions Risks to California*, and include impacts to public health, water resources, agriculture, coastal sea level, forest and biological resources, and energy.

[3] Overall, California has become drier over time, with five of the eight years of severe to extreme drought occurring between 2007 and 2016, and with unprecedented dry years in 2014 and 2015 (OEHHA 2018). Statewide precipitation has become increasingly variable from year to year, with the driest consecutive four years occurring from 2012 to 2015 (OEHHA 2018).

Table 5.8-2 Summary of GHG Emissions Risks to California

Impact Category	Potential Risk
Public Health Impacts	Heat waves will be more frequent, hotter, and longer Fewer extremely cold nights Poor air quality made worse Higher temperatures increase ground-level ozone levels
Water Resources Impacts	Decreasing Sierra Nevada snow pack Challenges in securing adequate water supply Potential reduction in hydropower Loss of winter recreation
Agricultural Impacts	Increasing temperature Increasing threats from pests and pathogens Expanded ranges of agricultural weeds Declining productivity Irregular blooms and harvests
Coastal Sea Level Impacts	Accelerated sea level rise Increasing coastal floods Shrinking beaches Worsened impacts on infrastructure
Forest and Biological Resource Impacts	Increased risk and severity of wildfires Lengthening of the wildfire season Movement of forest areas Conversion of forest to grassland Declining forest productivity Increasing threats from pest and pathogens Shifting vegetation and species distribution Altered timing of migration and mating habits Loss of sensitive or slow-moving species
Energy Demand Impacts	Potential reduction in hydropower Increased energy demand

Sources: CEC 2006, 2009; CCCC 2012; CNRA 2014; CalOES 2020.

5.8.1.2 REGULATORY BACKGROUND

This section describes the federal, state, and local regulations applicable to GHG emissions.

Federal

The US Environmental Protection Agency (EPA) announced on December 7, 2009, that GHG emissions threaten the public health and welfare of the American people and that GHG emissions from on-road vehicles contribute to that threat. The EPA's final findings respond to the 2007 US Supreme Court decision that GHG emissions fit within the Clean Air Act definition of air pollutants. The findings did not themselves impose any emission reduction requirements but allowed the EPA to finalize the GHG standards proposed in 2009 for new light-duty vehicles as part of the joint rulemaking with the Department of Transportation (USEPA 2009).

To regulate GHGs from passenger vehicles, the EPA was required to issue an endangerment finding. The finding identifies emissions of six key GHGs—CO_2, CH_4, N_2O, hydrofluorocarbons, perfluorocarbons, and SF_6—that have been the subject of scrutiny and intense analysis for decades by scientists in the United States and around the world. The first three are applicable to the proposed project's GHG emissions inventory because they constitute the majority of GHG emissions; they are the GHG emissions that should be evaluated as part of a project's GHG emissions inventory.

US Mandatory Reporting Rule for GHGs (2009).

In response to the endangerment finding, the EPA issued the Mandatory Reporting of GHG Rule that requires substantial emitters of GHG emissions (large stationary sources, etc.) to report GHG emissions data. Facilities that emit 25,000 $MTCO_2e$ or more per year are required to submit an annual report.

Update to Corporate Average Fuel Economy Standards (2017 to 2026)

The federal government issued new Corporate Average Fuel Economy (CAFE) standards in 2012 for model years 2017 to 2025, which required a fleet average of 54.5 miles per gallon in 2025. On March 30, 2020, the EPA finalized an updated CAFE and GHG emissions standards for passenger cars and light trucks and established new standards covering model years 2021 through 2026, known as the Safer Affordable Fuel Efficient (SAFE) Vehicles Final Rule for Model Years 2021 to 2026. In response to Executive Order (EO) 13990, the National Highway Traffic Safety Administration (NHTSA) announced new proposed fuel standards on August 5, 2021. On December 21, 2021, under the direction of EO 13990, the NHTSA repealed SAFE Vehicles Rule Part One, which had preempted state and local laws related to fuel economy standards. Fuel efficiency under the new standards proposed would increase 8 percent annually for model years 2024 to 2026 and increase estimate fleetwide average by 12 mpg for model year 2026 compared to model year 2021 (NHTSA 2021).

EPA Regulation of Stationary Sources under the Clean Air Act (Ongoing).

Pursuant to its authority under the Clean Air Act, the EPA has been developing regulations for new, large stationary sources of emissions such as power plants and refineries. Under former President Obama's 2013 Climate Action Plan, the EPA was directed to develop regulations for existing stationary sources as well. On June 19, 2019, the EPA issued the final Affordable Clean Energy (ACE) rule, which became effective on August 19, 2019. The ACE rule was crafted under the direction of President Trump's Energy Independence Executive Order. It officially rescinds the Clean Power Plan rule issued during the Obama Administration and sets emissions guidelines for states in developing plans to limit CO_2 emissions from coal-fired power plants. The Affordable Clean Energy rule was vacated by the United States Court of Appeals for the District of Columbia Circuit on January 19, 2021. The current administration is assessing options on potential future regulations.

State

Current State of California guidance and goals for reductions in GHG emissions are generally embodied in EOs S-03-05, B-30-15, and B-55-18; Assembly Bill (AB) 32; AB 1279; Senate Bill (SB) 32; and SB 375.

Executive Order S-03-05

EO S-03-05, signed June 1, 2005, set the following GHG reduction targets for the state:

- 2000 levels by 2010
- 1990 levels by 2020
- 80 percent below 1990 levels by 2050

Assembly Bill 32, the Global Warming Solutions Act (2006)

AB 32 was passed by the California state legislature on August 31, 2006, to place the state on a course toward reducing its contribution of GHG emissions. AB 32 follows the 2020 tier of emissions reduction targets established in EO S-03-05. CARB prepared the 2008 Scoping Plan to outline a plan to achieve the GHG emissions reduction targets of AB 32.

Executive Order B-30-15

EO B-30-15, signed April 29, 2015, sets a goal of reducing GHG emissions in the state to 40 percent below 1990 levels by year 2030. EO B-30-15 also directs CARB to update the Scoping Plan to quantify the 2030 GHG reduction goal for the state and requires state agencies to implement measures to meet the interim 2030 goal as well as the long-term goal for 2050 in AB 1279. It also requires the Natural Resources Agency to conduct triennial updates of the California adaption strategy, Safeguarding California, in order to ensure climate change is accounted for in state planning and investment decisions.

Senate Bill 32 and Assembly Bill 197

In September 2016, Governor Brown signed SB 32 and AB 197, making the executive order goal for year 2030 into a statewide, mandated legislative target. AB 197 established a joint legislative committee on climate change policies and requires the CARB to prioritize direction emissions reductions rather than the market-based cap-and-trade program for large stationary, mobile, and other sources.

2017 Climate Change Scoping Plan Update

EO B-30-15 and SB 32 required CARB to prepare another update to the Scoping Plan to address the 2030 target for the state. On December 24, 2017, CARB approved the 2017 Climate Change Scoping Plan Update, which outlines potential regulations and programs, including strategies consistent with AB 197 requirements, to achieve the 2030 target. The 2017 Scoping Plan establishes a new emissions limit of 260 $MMTCO_2e$ for the year 2030, which corresponds to a 40 percent decrease in 1990 levels by 2030 (CARB 2017c).

California's climate strategy will require contributions from all sectors of the economy, including an enhanced focus on zero-emission and near-zero-emission (ZE/NZE) vehicle technologies; continued investment in renewables, such as solar roofs, wind, and other types of distributed generation; greater use of low carbon fuels; integrated land conservation and development strategies; coordinated efforts to reduce emissions of short-lived climate pollutants (methane, black carbon, and fluorinated gases); and an increased focus on integrated land use planning to support livable, transit-connected communities and conservation of

agricultural and other lands. Requirements for GHG reductions at stationary sources complement local air pollution control efforts by the local air districts to tighten criteria air pollutants and toxic air contaminants emissions limits on a broad spectrum of industrial sources. Major elements of the 2017 Scoping Plan framework include:

- Implementing and/or increasing the standards of the Mobile Source Strategy, which include increasing ZE buses and trucks.
- Low Carbon Fuel Standard (LCFS) with an increased stringency (18 percent by 2030).
- Implementation of SB 350, which expands the Renewables Portfolio Standard (RPS) to 50 percent RPS and doubles energy efficiency savings by 2030.
- California Sustainable Freight Action Plan, which improves freight system efficiency, utilizes near-zero emissions technology, and deployment of ZE trucks.
- Implementing the Short-Lived Climate Pollutant Strategy, which focuses on reducing methane and hydrofluorocarbon emissions by 40 percent and anthropogenic black carbon emissions by 50 percent by year 2030.
- Post-2020 Cap-and-Trade Program that includes declining caps.
- Continued implementation of SB 375.
- Development of a Natural and Working Lands Action Plan to secure California's land base as a net carbon sink.

To the degree a project relies on GHG mitigation measures, CARB recommends that lead agencies prioritize on-site design features that reduce emissions, especially from VMT, and direct investments in GHG reductions within the project's region that contribute to potential air quality, health, and economic co-benefits. Where further project design or regional investments are infeasible or not proven to be effective, CARB recommends mitigating potential GHG impacts through purchasing and retiring carbon credits (CARB 2017).

Executive Order B-55-18

EO B-55-18, signed September 10, 2018, sets a goal "to achieve carbon neutrality as soon as possible, and no later than 2045, and achieve and maintain net negative emissions thereafter." EO B-55-18 directs CARB to work with relevant state agencies to ensure future Scoping Plans identify and recommend measures to achieve the carbon neutrality goal. The goal of carbon neutrality by 2045 is in addition to other statewide goals, meaning not only should emissions be reduced to 80 percent below 1990 levels by 2050, but that, by no later than 2045, the remaining emissions be offset by equivalent net removals of CO_2e from the atmosphere, including through sequestration in forests, soils, and other natural landscapes.

2022 Climate Change Scoping Plan Update

CARB released the Draft 2022 Scoping Plan on May 10, 2022. The Scoping Plan was updated to address the carbon neutrality goals of EO B-55-18. Previous Scoping Plans focused on specific GHG reduction targets for our industrial, energy, and transportation sectors—to meet 1990 levels by 2020, and then the more aggressive 40 percent below that for the 2030 target. Carbon neutrality takes it one step further by expanding actions to capture and store carbon including through natural and working lands and mechanical technologies, while drastically reducing anthropogenic sources of carbon pollution at the same time. The measures in the Scoping Plan would achieve 80 percent below 1990 levels by 2050. Final adoption of the 2022 Scoping Plan is anticipated in late fall 2022 (CARB 2022a).

CARB's 2022 Scoping Plan identifies strategies that would be most impactful at the local level for ensuring substantial process towards the State's carbon neutrality goals (see Table 5.8-3, *Priority Strategies for Local Government Climate Action Plans*).

Table 5.8-3 Priority Strategies for Local Government Climate Action Plans

Priority Area	Priority Strategies
Transportation Electrification	Convert local government fleets to zero-emission vehicles (ZEV).
	Create a jurisdiction-specific ZEV ecosystem to support deployment of ZEVs statewide (such as permit streamlining, infrastructure siting, consumer education, or preferential parking policies).
VMT Reduction	Reduce or eliminate minimum parking standards in new developments,
	Adopt and implement Complete Streets policies and investments, consistent with general plan circulation element requirements,
	Increase public access to shared clean mobility options (such as planning for and investing in electric shuttles, bike share, car share, transit).
	Implement parking pricing or transportation demand management pricing strategies.
	Amend zoning or development codes to enable mixed-use, walkable, and compact infill development (such as increasing allowable density of the neighborhood).
	Preserve natural and working lands.
Building Decarbonization	Adopt policies and incentive programs to implement energy efficiency retrofits (such as weatherization, lighting upgrades, replacing energy intensive appliances and equipment with more efficient systems, etc.).
	Adopt policies and incentive programs to electrify all appliances and equipment in existing buildings.
	Adopt policies and incentive programs to reduce electrical loads from equipment plugged into outlets (such as purchasing Energy Star equipment for municipal buildings, occupancy sensors, smart power strips, equipment controllers, etc.).
	Facilitate deployment of renewable energy production and distribution and energy storage.

Source: CARB 2022a.

For CEQA projects for proposed land use developments, CARB recommends demonstrating that they are aligned with State climate goals based on the attributes of land use development that reduce operational GHG emissions while simultaneously advancing fair housing. Attributes that accommodate growth in a manner consistent with the GHG and equity goals of SB 32 have all the following attributes:

- At least 20 percent of the units are affordable to lower-income residents.
- Result in no net loss of existing affordable units.
- Utilize existing infill sites that are surrounded by urban uses, and reuse or redevelop previously developed, underutilized land presently served by existing utilities and essential public services (e.g., transit, streets, water, sewer).
- Include transit-supportive densities (minimum of 20 residential dwelling units/acre), or are in proximity to existing transit (within ½ mile), or satisfy more detailed and stringent criteria specified in the region's Sustainable Communities Strategy (SCS), for "SCS consistency" that would go further to reduce emissions.
- Do not result in the loss or conversion of the State's natural and working lands.
- Use all electric appliances, without any natural gas connections, and would not use propane or other fossil fuels for space heating, water heating, or indoor cooking.
- Provide EV charging infrastructure at least in accordance with the California Green Building Standards Code (CalGreen) Tier 2 standards.
- Relax parking requirements by:
    - Eliminating parking requirements or including maximum allowable parking ratios.
    - Providing residential parking supply at a ratio of <1 parking space per unit.
    - Unbundling residential parking costs from costs to rent or lease. (CARB 2022a)

The second approach to project-level alignment with State climate goals is net zero GHG emissions. The third approach to demonstrating project-level alignment with State climate goals is to align with GHG thresholds of significance, which many local air quality management districts (AQMD) and air pollution control districts (APCD) have developed or adopted (CARB 2022a).

Assembly Bill 1279

AB 1279, signed by Governor Newsom in September 2022, codifies the carbon neutrality targets of EO B-55-18 for year 2045 and sets a new legislative target for year 2045 of 85 percent below 1990 levels. SB 1279 also requires CARB to update the Scoping Plan to address these new targets.

Senate Bill 375

SB 375, the Sustainable Communities and Climate Protection Act, was adopted in 2008 to connect the GHG emissions reduction targets established in the 2008 Scoping Plan for the transportation sector to local land use decisions that affect travel behavior. Its intent is to reduce GHG emissions from light-duty trucks and automobiles (excludes emissions associated with goods movement) by aligning regional long-range

transportation plans, investments, and housing allocations to local land use planning to reduce vehicle miles traveled (VMT) and vehicle trips. Specifically, SB 375 required CARB to establish GHG emissions reduction targets for each of the 18 metropolitan planning organizations (MPO). SCAG is the MPO for the Southern California region, which includes Los Angeles, Orange, San Bernardino, Riverside, Ventura, and Imperial counties. Pursuant to the recommendations of the Regional Transportation Advisory Committee, CARB adopted per capita reduction targets for each of the MPOs rather than a total magnitude reduction target.

2017 Update to the SB 375 Targets

CARB is required to update the targets for the MPOs every eight years. In June 2017, CARB released updated targets and technical methodology and released another update in February 2018, which became effective in October 2018. CARB adopted the updated targets and methodology on March 22, 2018. All sustainable communities strategies (SCS) adopted after October 1, 2018, are subject to these new targets. The updated targets consider the need to further reduce VMT, as identified in the 2017 Scoping Plan Update, while balancing the need for additional and more flexible revenue sources to incentivize positive planning and action toward sustainable communities. Like the 2010 targets, the updated SB 375 targets are in units of percent per capita reduction in GHG emissions from automobiles and light trucks compared to 2005. This excludes reductions anticipated from implementation of state technology and fuels strategies and any potential future state strategies such as statewide road user pricing. The proposed targets call for greater per-capita GHG emission reductions from SB 375 than are currently in place, which for 2035 translates into proposed targets that either match or exceed the emission reduction levels in the MPOs' currently adopted SCSs. As proposed, CARB staff's proposed targets would result in an additional reduction of over 8 $MMTCO_2e$ in 2035 compared to the current targets. For the next round of SCS updates, CARB's updated targets for the SCAG region are an 8 percent per capita GHG reduction in 2020 from 2005 levels (unchanged from the 2010 target) and a 19 percent per capita GHG reduction in 2035 from 2005 levels (compared to the 2010 target of 13 percent) (CARB 2018).

SCAG's Regional Transportation Plan / Sustainable Communities Strategy

SB 375 requires each MPO to prepare a sustainable communities strategy in its regional transportation plan. For the SCAG region, the draft 2020-2045 RTP/SCS (Connect SoCal) was adopted on May 7, 2020, for the limited purpose of transportation conformity (SCAG 2020). Connect SoCal was fully adopted in September 2020. In general, the SCS outlines a development pattern for the region that, when integrated with the transportation network and other transportation measures and policies, would reduce VMT from automobiles and light-duty trucks and thereby reduce GHG emissions from these sources.

Connect SoCal focuses on the continued efforts of the previous RTP/SCSs to integrate transportation and land-use strategies in the development of the SCAG region through the horizon year 2045 (SCAG 2020). Connect SoCal forecasts that the SCAG region will meet its GHG per capita reduction targets of 8 percent by 2020 and 19 percent by 2035. It also forecasts that implementation of the plan will reduce VMT per capita in year 2045 by 4.1 percent compared to baseline conditions for that year. Connect SoCal includes a "Core Vision" that centers on maintaining and better managing the transportation network for moving people and goods while expanding mobility choices by locating housing, jobs, and transit closer together and increasing investments in transit and complete streets (SCAG 2020).

Transportation Sector Specific Regulations

Assembly Bill 1493

California vehicle GHG emission standards were enacted under AB 1493 (Pavley I). Pavley I is a clean-car standard that reduces GHG emissions from new passenger vehicles (light-duty auto to medium-duty vehicles) from 2009 through 2016 and is anticipated to reduce GHG emissions from new passenger vehicles by 30 percent in 2016. California implements the Pavley I standards through a waiver granted to California by the EPA. In 2012, the EPA issued a Final Rulemaking that sets even more stringent fuel economy and GHG emissions standards for model years 2017 through 2025 light-duty vehicles. (See also the previous discussion in federal regulations under "Update to Corporate Average Fuel Economy Standards [2017 to 2026].") In January 2012, CARB approved the Advanced Clean Cars program (formerly known as Pavley II) for model years 2017 through 2025. The program combines the control of smog, soot, and GHGs with requirements for greater numbers of ZE vehicles into a single package of standards. Under California's Advanced Clean Car program, by 2025 new automobiles will emit 34 percent less GHG emissions and 75 percent less smog-forming emissions. In August 2022, CARB approved the new Advanced Clean Cars II standards that will ensure all new passenger cars, trucks and SUVs sold in the state will be zero-emitting by 2035 (CARB 2022b). The Advanced Clean Cars II standards will amend the Zero-Emission Vehicle Regulation to require an increase in zero-emission vehicles and amends the Low-Emission Vehicle Regulations to include more stringent standards for gasoline cars and heavier passenger trucks to continue to reduce smog-forming emissions.

Executive Order S-01-07

On January 18, 2007, the state set a new LCFS for transportation fuels sold in the state. EO S-01-07 set a declining standard for GHG emissions measured in CO_2e gram per unit of fuel energy sold in California. The LCFS required a reduction of 2.5 percent in the carbon intensity of California's transportation fuels by 2015 and a reduction of at least 10 percent by 2020. The standard applied to refiners, blenders, producers, and importers of transportation fuels, and used market-based mechanisms to allow these providers to choose the most economically feasible methods for reducing emissions during the "fuel cycle."

Executive Order B-16-2012

On March 23, 2012, the state identified that CARB, the California Energy Commission (CEC), the Public Utilities Commission, and other relevant agencies worked with the Plug-in Electric Vehicle Collaborative and the California Fuel Cell Partnership to establish benchmarks to accommodate ZE vehicles in major metropolitan areas, including infrastructure to support them (e.g., electric vehicle charging stations). EO B-16-2012 also directed the number of ZE vehicles in California's state vehicle fleet to increase through the normal course of fleet replacement so that at least 10 percent of fleet purchases of light-duty vehicles are ZE by 2015 and at least 25 percent by 2020. The executive order also established a target for the transportation sector of reducing GHG emissions to 80 percent below 1990 levels.

Executive Order N-79-20

On September 23, 2020, Governor Newsom signed EO N-79-20, whose goal is that 100 percent of in-state sales of new passenger cars and trucks will be ZE by 2035. Additionally, the fleet goals for trucks are that 100

percent of drayage trucks are ZE by 2035, and 100 percent of medium- and heavy-duty vehicles in the state are ZE by 2045, where feasible. The EO's goal for the state is to transition to 100 percent ZE off-road vehicles and equipment by 2035, where feasible.

Renewables Portfolio: Carbon Neutrality Regulations

Senate Bills 1078, 107, and X1-2 and Executive Order S-14-08

A major component of California's Renewable Energy Program is the renewables portfolio standard established under SBs 1078 (Sher) and 107 (Simitian). Under the Renewable Portfolio Standard (RPS), certain retail sellers of electricity were required to increase the amount of renewable energy each year by at least 1 percent in order to reach at least 20 percent by December 30, 2010. EO S-14-08, signed in November 2008, expanded the state's renewable energy standard to 33 percent renewable power by 2020. This standard was adopted by the legislature in 2011 (SB X1-2). Renewable sources of electricity include wind, small hydropower, solar, geothermal, biomass, and biogas. The increase in renewable sources for electricity production decreases indirect GHG emissions from development projects because electricity production from renewable sources is generally considered carbon neutral.

Senate Bill 350

SB 350 (de Leon) was signed into law in September 2015 and establishes tiered increases to the RPS—40 percent by 2024, 45 percent by 2027, and 50 percent by 2030. SB 350 also set a new goal to double the energy-efficiency savings in electricity and natural gas through energy efficiency and conservation measures.

Senate Bill 100

On September 10, 2018, Governor Brown signed SB 100. Under SB 100, the RPS for public-owned facilities and retail sellers consists of 44 percent renewable energy by 2024, 52 percent by 2027, and 60 percent by 2030. SB 100 also established a new RPS requirement of 50 percent by 2026. Furthermore, the bill establishes an overall state policy that eligible renewable energy resources and zero-carbon resources supply 100 percent of all retail sales of electricity to California end-use customers and 100 percent of electricity procured to serve all state agencies by December 31, 2045. Under the bill, the state cannot increase carbon emissions elsewhere in the western grid or allow resource shuffling to achieve the 100 percent carbon-free electricity target.

Senate Bill 1020

SB 1020 was signed into law on September 16, 2022. SB 1020 provides interim RPS targets (90 percent renewable energy by 2035 and 95 percent renewable energy by 2040) and requires renewable energy and zero-carbon resources to reach 100 percent clean electricity by 2045.

Energy Efficiency Regulations

California Building Code: Building Energy Efficiency Standards

Energy conservation standards for new residential and nonresidential buildings were adopted by the California Energy Resources Conservation and Development Commission (now the CEC) in June 1977 (Title

24, Part 6, of the California Code of Regulations [CCR]). Title 24 requires the design of building shells and building components to conserve energy. The standards are updated periodically to allow for the consideration and possible incorporation of new energy efficiency technologies and methods. The 2019 Building Energy Efficiency Standards were adopted on May 9, 2018, and went into effect on January 1, 2020.

The 2019 standards move toward cutting energy use in new homes by more than 50 percent and require the installation of solar photovoltaic systems for single-family homes and multifamily buildings of three stories and less. The 2019 standards focus on four key areas: 1) smart residential photovoltaic systems; 2) updated thermal envelope standards (preventing heat transfer from the interior to the exterior and vice versa); 3) residential and nonresidential ventilation requirements; 4) and nonresidential lighting requirements (CEC 2018a). Under the 2019 standards, nonresidential buildings are 30 percent more energy efficient than under the 2016 standards, and single-family homes are 7 percent more energy efficient (CEC 2018b). When accounting for the electricity generated by the solar photovoltaic system, single-family homes would use 53 percent less energy compared to homes built to the 2016 standards (CEC 2018b).

Furthermore, on August 11, 2021, the CEC adopted the 2022 Building Energy Efficiency Standards, which were subsequently approved by the California Building Standards Commission in December 2021. The 2022 standards become effective and replace the existing 2019 standards on January 1, 2023. The 2022 standards would require mixed-fuel single-family homes to be electric-ready to accommodate replacement of gas appliances with electric appliances. In addition, the new standards also include prescriptive photovoltaic system and battery requirements for high-rise, multifamily buildings (i.e., more than three stories) and noncommercial buildings such as hotels, offices, medical offices, restaurants, retail stores, schools, warehouses, theaters, and convention centers (CEC 2021).

California Building Code: CALGreen

On July 17, 2008, the California Building Standards Commission adopted the nation's first green building standards. The California Green Building Standards Code (24 CCR, Part 11, known as "CALGreen") was adopted as part of the California Building Standards Code. CALGreen established planning and design standards for sustainable site development, energy efficiency (in excess of the California Energy Code requirements), water conservation, material conservation, and internal air contaminants.[4] The mandatory provisions of CALGreen became effective January 1, 2011, and were last updated in 2019. The 2019 CALGreen standards became effective on January 1, 2020.

2006 Appliance Efficiency Regulations

The 2006 Appliance Efficiency Regulations (20 CCR Sections 1601–1608) were adopted by the CEC on October 11, 2006, and approved by the California Office of Administrative Law on December 14, 2006. The regulations include standards for both federally regulated appliances and non–federally regulated appliances. Though these regulations are now often viewed as "business as usual," they exceed the standards imposed by all other states, and they reduce GHG emissions by reducing energy demand.

[4] The green building standards became mandatory in the 2010 edition of the code.

Solid Waste Diversion Regulations

AB 939: Integrated Waste Management Act of 1989

California's Integrated Waste Management Act of 1989 (AB 939, Public Resources Code Section 40050 et seq.) set a requirement for cities and counties throughout the state to divert 50 percent of all solid waste from landfills by January 1, 2000, through source reduction, recycling, and composting. In 2008, the requirements were modified to reflect a per capita requirement rather than tonnage. To help achieve this, the Act requires that each city and county prepare and submit a source reduction and recycling element. AB 939 also established the goal for all California counties to provide at least 15 years of ongoing landfill capacity.

AB 341

AB 341 (Chapter 476, Statutes of 2011) increased the statewide goal for waste diversion to 75 percent by 2020 and requires recycling of waste from commercial and multifamily residential land uses. Section 5.408 of CALGreen also requires that at least 65 percent of the nonhazardous construction and demolition waste from nonresidential construction operations be recycled and/or salvaged for reuse.

AB 1327

The California Solid Waste Reuse and Recycling Access Act (AB 1327, Public Resources Code Section 42900 et seq.) requires areas to be set aside for collecting and loading recyclable materials in development projects. The act required the California Integrated Waste Management Board to develop a model ordinance for adoption by any local agency requiring adequate areas for collection and loading of recyclable materials as part of development projects. Local agencies are required to adopt the model or an ordinance of their own.

AB 1826

In October of 2014, Governor Brown signed AB 1826 requiring businesses to recycle their organic waste on and after April 1, 2016, depending on the amount of waste they generate per week. This law also requires that on and after January 1, 2016, local jurisdictions across the state implement an organic waste recycling program to divert organic waste generated by businesses and multifamily residential dwellings with five or more units. Organic waste means food waste, green waste, landscape and pruning waste, nonhazardous wood waste, and food-soiled paper waste that is mixed with food waste.

Water Efficiency Regulations

SBX7-7

The 20x2020 Water Conservation Plan was issued by the Department of Water Resources (DWR) in 2010 pursuant to Senate Bill 7, which was adopted during the 7th Extraordinary Session of 2009–2010 and therefore dubbed "SBX7-7." SBX7-7 mandated urban water conservation and authorized the DWR to prepare a plan implementing urban water conservation requirements (20x2020 Water Conservation Plan). In addition, it required agricultural water providers to prepare agricultural water management plans, measure water deliveries to customers, and implement other efficiency measures. SBX7-7 required urban water providers to adopt a water conservation target of a 20 percent reduction in urban per capita water use by 2020 compared to 2005 baseline use.

AB 1881: Water Conservation in Landscaping Act

The Water Conservation in Landscaping Act of 2006 (AB 1881) requires local agencies to adopt the updated DWR model ordinance or an equivalent. AB 1881 also requires the CEC to consult with the DWR to adopt, by regulation, performance standards and labeling requirements for landscape irrigation equipment, including irrigation controllers, moisture sensors, emission devices, and valves, to reduce the wasteful, uneconomic, inefficient, or unnecessary consumption of energy or water.

Short-Lived Climate Pollutant Reduction Strategy

On September 19, 2016, the Governor signed SB 1383 to supplement the GHG reduction strategies in the Scoping Plan to consider short-lived climate pollutants, including black carbon and methane. Black carbon is the light-absorbing component of fine particulate matter produced during the incomplete combustion of fuels. SB 1383 required the state board, no later than January 1, 2018, to approve and begin implementing a comprehensive strategy to reduce emissions of short-lived climate pollutants to achieve a reduction in methane by 40 percent, hydrofluorocarbon gases by 40 percent, and anthropogenic black carbon by 50 percent below 2013 levels by 2030. The bill also established targets for reducing organic waste in landfills. On March 14, 2017, CARB adopted the Short-Lived Climate Pollutant Reduction Strategy, which identifies the state's approach to reducing anthropogenic and biogenic sources of short-lived climate pollutants. Anthropogenic sources of black carbon include on- and off-road transportation, residential wood burning, fuel combustion (char broiling), and industrial processes. According to CARB, ambient levels of black carbon in California are 90 percent lower than in the early 1960s, despite the tripling of diesel fuel use (CARB 2017a). In-use on-road rules were expected to reduce black carbon emissions from on-road sources by 80 percent between 2000 and 2020. South Coast AQMD is one of the air districts that requires air pollution control technologies for chain-driven broilers, which reduces particulate emissions from these char broilers by over 80 percent (CARB 2017b).

Local

There are no local regulations or plans adopted for GHGs in Moorpark.

5.8.1.3 EXISTING CONDITIONS

California's GHG Sources and Relative Contribution

In 2021, the statewide GHG emissions inventory was updated for 2000 to 2019 emissions using the GWPs in IPCC's AR4 (IPCC 2013). Based on these GWPs, California produced 418.2 $MMTCO_2e$ GHG emissions in 2019. California's transportation sector was the single largest generator of GHG emissions, producing 39.7 percent of the state's total emissions. Industrial sector emissions made up 21.1 percent, and electric power generation made up 14.1 percent of the state's emissions inventory. Other major sectors of GHG emissions include commercial and residential (10.5 percent), agriculture and forestry (7.6 percent), high-GWP gases (4.9 percent), and recycling and waste (2.1 percent) (CARB 2021).

Since the peak level in 2004, California's GHG emissions have generally followed a decreasing trend. In 2016, California statewide GHG emissions dropped below the AB 32 target for year 2020 of 431 $MMTCO_2e$ and

have remained below this target since then. In 2019, emissions from routine GHG-emitting activities statewide were almost 13 $MMTCO_2e$ lower than the AB 32 target for year 2020. Per capita GHG emissions in California have dropped from a 2001 peak of 14.0 $MTCO_2e$ per person to 10.5 $MTCO_2e$ per person in 2019, a 25 percent decrease.

Transportation emissions continued to decline in 2019 statewide as they had done in 2018, with even more substantial reductions due to a significant increase in renewable diesel. Since 2008, California's electricity sector has followed an overall downward trend in emissions. In 2019, solar power generation continued its rapid growth since 2013. Emissions from high-GWP gases comprised 4.9 percent of California's emissions in 2019. This continues the increasing trend as the gases replace ozone-depleting substances being phased out under the 1987 Montreal Protocol. Overall trends in the inventory also demonstrate that the carbon intensity of California's economy (the amount of carbon pollution per million dollars of gross domestic product) has declined 45 percent since the 2001 peak, though the state's gross domestic product grew 63 percent during this period (CARB 2021).

Existing Communitywide GHG Emissions

The existing land uses in Moorpark consist of single- and multifamily residences and retail, office, commercial, industrial, and institutional uses. Operation of these land uses generates GHG emissions from natural gas used for energy, heating, and cooking; electricity usage; vehicle trips for employees and residents; area sources such as landscaping equipment and consumer cleaning products; water demand; waste generation; and solid waste generation.[5] Table 5.8-4, *Existing City of Moorpark GHG Emissions Inventory,* shows the emissions associated with existing land uses in the city.

Table 5.8-4 Existing City of Moorpark GHG Emissions Inventory

Sector	Existing $MTCO_2e$/year	Percent of Total
Building Electricity	26,477	15%
Building Natural Gas	35,645	21%
On-Road Transportation	64,925	38%
Off-Road Vehicles and Equipment	2,613	1.5%
Solid Waste/Landfills	2,232	1.3%
Refrigerants	17,245	10%
Water Use	1,889	1.1%
Wastewater Treatment	20,939	12%
Total	171,965	100%
Service Population	26,477	NA
$MTCO_2e$/SP	3.5	NA

Source: Appendix D.
Note: Totals may not add to 100% due to rounding.

[5] Emissions from water demand and wastewater are emissions associated with electricity used to supply, treat, and distribute water.

5.8.2 Thresholds of Significance

According to Appendix G of the CEQA Guidelines, a project would normally have a significant effect on the environment if the project would:

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

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

Ventura County APCD

The VCAPCD has not formally adopted GHG thresholds. In the context of CEQA, a project that achieves "no net increase" from the CEQA baseline would not result in significant GHG impacts. This is reiterated in the Natural Resources Agency's 2009 Final Statement of Reasons pursuant to Senate Bill 97, which states that: "section 15054.4(b)(1) is not intended to imply a zero net emissions threshold of significance. As case law makes clear, there is no 'one molecule' rule in CEQA." Consequently, a zero net increase in GHG emissions is used to determine whether the project would result in a substantial increase in GHG emissions.

This sections also analyzes the potential for the project to conflict with the GHG reduction goals established by the State under AB 1279, which requires an 85 percent reduction in statewide GHG emissions from existing conditions (year 2020) and a statewide goal for carbon neutrality by year 2045. Given that the State's carbon neutrality goals cannot be achieved without carbon dioxide removal (CDR), which is outside of the jurisdictional control of cities and counties, this CEQA document evaluates consistency with the 85 percent reduction from 2020 levels and substantial progress toward the State's carbon neutrality goals. Based on the City's existing emissions inventory, an 85 percent reduction in emissions would be:

- 25,795 $MTCO_2e$ by 2045

Mass Emissions and Health Effects

On December 24, 2018, in the case, *Sierra Club et al. v. County of Fresno et al.* (Friant Ranch), the California Supreme Court determined that the EIR for the proposed Friant Ranch project failed to adequately analyze the project's air quality impacts on human health. The EIR prepared for the project, which involved a master planned retirement community in Fresno County, showed that project-related mass emissions would exceed the San Joaquin Valley Air Pollution Control District's regional significance thresholds. In its findings, the California Supreme Court affirmed the holding of the Court of Appeal that EIRs for projects must not only identify impacts to human health, but also provide an "analysis of the correlation between the project's emissions and human health impacts" related to each criteria air pollutant that exceeds the regional significance thresholds or explain why it could not make such a connection. In general, the ruling focuses on the correlation of emissions of toxic air contaminants and criteria air pollutants and their impact to human health.

In 2009, the EPA issued an endangerment finding for six GHGs (CO_2, CH_4, N_2O, HFCs, PFCs, and SF_6) in order to regulate GHG emissions from passenger vehicles. The endangerment finding is based on evidence that shows an increase in mortality and morbidity associated with increases in average temperatures, which increase the likelihood of heat waves and ozone levels. The effects of climate change are identified in Table 4.8-2. While these identified effects such as sea level rise and increased in extreme weather, can indirectly impact human health, neither the EPA nor CARB has established ambient air quality standards for GHG emissions. The state's GHG reduction strategy outlines a path to avoid the most catastrophic effects of climate change. Yet the state's GHG reduction goals and strategies are based on the state's path toward reducing statewide cumulative GHGs as outlined in AB 32, SB 32, AB 1279, and EO B-55-18.

As mentioned above, the two significance thresholds that the City uses to analyze GHG impacts are based on achieving the statewide GHG reduction goals (GHG-1) and relying on consistency with policies or plans adopted to reduce GHG emissions (GHG-2). Further, because no single project is large enough to result in a measurable increase in global concentration of GHG emissions, climate change impacts of a project are considered on a cumulative basis. Without federal ambient air quality standards for GHG emissions and given the cumulative nature of GHG emissions and the City's significance thresholds that are tied to reducing the state's cumulative GHG emissions, it is not feasible at this time to connect the project's specific GHG emission to the potential health impacts of climate change.

5.8.3 Environmental Impacts

5.8.3.1 METHODOLOGY

This GHG evaluation was prepared in accordance with the requirements of CEQA to determine if significant GHG impacts are likely to occur in conjunction with future development that would be accommodated by the Moorpark General Plan 2050. The City's GHG emissions inventory includes the following sectors:

- **Building Energy.** Emissions associated with electricity and natural gas use for residential and nonresidential land uses in the City were modeled based on data provided by Southern California Edison (SCE) and the Southern California Gas Company (SoCalGas), respectively. Due to the 15/15 Rule electricity use data for industrial land uses was aggregated with the nonresidential land uses in the data provided by SCE.[6] Existing 2022 emissions are based on the 2019 electricity usage and extrapolated based on past four years from SoCalGas and SCE. Forecasts for year 2050 are adjusted for increases in population for residential electricity and natural gas use and non-residential square footage for non-residential electricity and natural gas use in the City. Carbon intensity for year 2022 and 2050 are based on the carbon intensity for SCE identified in the 2022 CalEEMod User's Guide, Appendix G (CAPCOA

[6] The 15/15 Rule was adopted by the California Public Utilities Commission in the Direct Access Proceeding (CPUC Decision 97-10-031) to protect customer confidentiality. The 15/15 rule requires that any aggregated information provided by a utility must be made up of at least 15 customers, and a single customer's load must be less than 15 percent of an assigned category. If the number of customers in the compiled data is below 15, or if a single customer's load is more than 15 percent of the total data, categories must be combined before the information is released. The Rule further requires that if the 15/15 Rule is triggered for a second time after the data have been screened once already using the 15/15 Rule, the customer be dropped from the information provided.

2022). To provide a conservative estimate of GHG emissions due to the ability of end-users to opt-out of CPA's electricity service, existing emissions are based on SCE's 2022 carbon intensity. Year 2050 carbon intensity is based on the participation rate for CPA's "Clean Power" default plan of 96.21 percent (CPA 2022).

- **Transportation.** Transportation emissions forecasts were modeled using emissions data from CARB's EMFAC2021 V1.0.2 web database. Model runs were based on daily VMT data provided by Iteris (see Appendix K) and calendar year 2022 (existing) and 2050 emission rates.[7] The VMT is based on the origin-destination using the Ventura County Transportation Model and includes the full trip length for land uses in the city and a 50 percent reduction in the trip length for external-internal/internal-external trips based on the recommendations of CARB's Regional Targets Advisory Committee under SB 375.[8] Consistent with CARB's methodology within the Climate Change Scoping Plan Measure Documentation Supplement, daily VMT was multiplied by 347 days per year to account for reduced traffic on weekends and holidays to determine annual emissions.

- **Off-Road Equipment.** OFFROAD is a database of equipment use and associated emissions for each county compiled by CARB. Off-road equipment in the city is based on year 2022 emission rates for Ventura County obtained from CARB's OFFROAD V1.0.3 web database. OFFROAD was used to estimate criteria air pollutant emissions from lawn and garden, light commercial, and construction equipment in the city. To determine the percentage of emissions attributable to the city, light commercial equipment is estimated based on employment for Moorpark as a percentage of Ventura County and forecast based on the change in employment in the city. Construction equipment use is estimated based on building permit data for Moorpark and County of Ventura from data compiled by the US Census and assumes that construction emissions for the forecast year would be similar to historical levels. Lawn and garden equipment is based on the percentage of population in Moorpark compared to Ventura County and forecast based on the change in population in the city.

- **Refrigerant Leakage.** Refrigerants are based on the statewide 2019 refrigerant use and statewide population based on the 2020 census data in order to derive emissions per person. Emissions from this sector are based on AR4 since the inventory is not available with AR5 GWPs.

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[7] The Year 2050 inventory is represented by the projected emissions that the existing land uses would generate in the future, using year 2040 emission factors for on-road vehicles. To isolate the impacts related to the change in land uses proposed under the Moorpark General Plan 2050, emissions related to the update will be based on the difference in emissions generated by the existing and proposed land uses under year 2040 conditions. This approach is taken because existing land uses would be subject to regulations that come into effect in the future that reduce mobile-source emissions. Thus, the level of emissions the existing land uses generate today would not be generated in perpetuity, but would be affected by these state regulations.

[8] For accounting purposes, there are three types of trips:
Internal-Internal. Vehicle trips that originated and terminated within the City (Internal-Internal, I-I). Using the accounting rules established by RTAC, 100 percent of the length of these trips and their emissions are attributed to the City.
Internal-External/External-Internal. Vehicle trips that either originated or terminated (but not both) in the City (Internal-External or External-Internal, I-X and X-I). Using the accounting rules established by RTAC, 50 percent of the trip length for these trips is attributed to the City.
External-External. Vehicle trips that neither originated nor terminated in the City. These trips are commonly called pass-through trips (External-External, X-X). Using the accounting rules established by RTAC, these trips are not counted toward the City's VMT or emissions.

- **Solid Waste Disposal.** GHG emissions from solid waste disposal by residents and employees in the city were quantified based on the waste-in-place method. This method assumes that the degradable organic component in waste decays slowly throughout a few decades, during which CH_4 and biogenic CO_2 are formed. If conditions are constant, the rate of CH_4 production depends solely on the amount of carbon remaining in the waste. As a result, emissions of CH_4 from waste deposited in a disposal site are highest in the first few years, then gradually decline. Significant CH_4 production typically begins one or two years after waste disposal in a landfill and continues for 10 to 60 years or longer. Waste disposal was averaged over several years to account for fluctuations in average annual solid waste disposal. Waste generated was based on data obtained from the California Department of Resources Recycling and Recovery (CalRecycle), to provide an estimate of GHG emissions for existing conditions (2022). GHG emissions from solid waste disposal in the baseline year were modeled using CARB's Landfill Emissions Tool Version 1.09, which includes waste characterization data from CalRecycle. Because the landfill gas captured is not under the jurisdiction of the City of Moorpark, the landfill gas emissions from the capture system are not included in the inventory. Only fugitive sources of GHG emissions from landfills are included. Modeling assumes a 75 percent reduction in fugitive GHG emissions from the landfill's Landfill Gas Capture System. The landfill gas capture efficiency is based on CARB's LGOP, Version 1.3. Total GHG emissions from waste disposal in 2022 were forecast based on the percentage increase in service population for the city. The emissions forecast does not account for reductions from increasing waste diversion.

- **Water Use and Wastewater Treatment.** GHG emissions from this sector include indirect GHG emissions from the embodied energy associated with water use and wastewater generation and fugitive GHG emissions from processing wastewater. The total annual existing and proposed project water demand and wastewater generation in the city are based on Infrastructure Report prepared by Fuscoe Engineering (see Appendix D). Electricity use from water use is estimated using energy rates identified by in the 2022 CalEEMod Users Guide (CAPCOA 2022). Then energy is multiplied by the carbon intensity of energy for SCE. Wastewater treatment also results in direct CH_4 emissions from wastewater processing, which are based on the emission rates identified in the 2022 CalEEMod Users Guide (CAPCOA 2022).

Industrial sources of emissions that require a permit from VCAPCD are not included in the community inventory. Life-cycle emissions are not included in this analysis because not enough information is available for the Moorpark General Plan 2050; and therefore, they would be speculative.[9]. Black carbon emissions are

[9] Life cycle emissions include indirect emissions associated with materials manufacture. However, these indirect emissions involve numerous parties, each of which is responsible for GHG emissions of their particular activity. The California Resources Agency, in adopting the CEQA Guidelines Amendments on GHG emissions found that lifecycle analysis was not warranted for project-specific CEQA analysis in most situations, for a variety of reasons, including lack of control over some sources, and the possibility of double-counting emissions (see Final Statement of Reasons for Regulatory Action, December 2009). Because the amount of materials consumed during the operation or construction of the proposed project is not known, the origin of the raw materials purchased is not known, and manufacturing information for those raw materials is also not known, calculation of life cycle emissions would be speculative. A life-cycle analysis is not warranted (OPR 2008).

not included in the GHG analysis because CARB does not include this short-lived climate pollutant in the State's GHG emissions inventory but treats it separately.[10]

5.8.3.2 IMPACT ANALYSIS

The following impact analysis addresses thresholds of significance for which the Initial Study disclosed potentially significant impacts. The applicable thresholds are identified in brackets after the impact statement.

Impact 5.8-1: Implementation of the Moorpark General Plan 2050 would result in a substantial increase in emissions, and emissions in the city would not be aligned with a trajectory to achieve the goals established under Assembly Bill 1279 or progress toward the State's carbon neutrality goal. [Threshold GHG-1]

Development under the Moorpark General Plan 2050 would contribute to global climate change through direct and indirect emissions of GHG from land uses within the city. A general plan does not directly result in development without subsequent approvals of development projects. Before any development can occur in the city, it must be analyzed for consistency with the General Plan, zoning requirements, and other applicable local and State requirements; comply with the requirements of CEQA; and obtain all necessary clearances and permits.

Horizon Year 2050 Emissions Forecast

Buildout of the proposed project is not linked to a specific development time frame but is assumed over a 28-year horizon. Implementation of the Moorpark General Plan 2050 by the horizon year of 2050 would result in a net increase of 45,335 residents and 16,917 employees in the city. Development that would be accommodated by the proposed project would generate a net increase of 129,698 daily VMT at buildout (based on origin-destination methodology and taking into account the CARB RTAC methodology; see Appendix D). The community GHG emissions inventory for the proposed project at buildout compared to existing conditions is in Table 5.8-5, *City of Moorpark GHG Emissions Forecast*.

[10] Particulate matter emissions, which include black carbon, are analyzed in Section 5.3, *Air Quality*. The majority of anthropogenic sources come from transportation—specifically, heavy-duty vehicles. The share of black carbon emissions from transportation is dropping rapidly and is expected to continue to do so between now and 2030 as a result of California's air quality programs. The remaining black carbon emissions will come largely from woodstoves/fireplaces, off-road applications, and industrial/commercial combustion (CARB 2022a).

Table 5.8-5 City of Moorpark GHG Emissions Forecast

Emissions Sector	GHG Emissions ($MTCO_2e$/Year)					
	Existing (2022)		Proposed Project 2050		Net Change	
Building Electricity	26,477	15%	38,047	18%	11,570	44%
Building Natural Gas	35,645	21%	52,963	26%	17,318	49%
On-Road Transportation	64,925	38%	53,868	26%	-11,056	-17%
Off-Road Vehicles and Equipment	2,613	1.5%	3,798	2%	1,184	45%
Solid Waste/Landfills	2,232	1.3%	3,347	2%	1,115	50%
Refrigerants	17,245	10%	25,449	12%	8,203	48%
Water Use	1,889	1.1%	1,702	1%	-187	-10%
Wastewater Treatment	20,939	12%	27,108	13%	6,169	29%
Total Community Emissions	**171,965**	**100%**	**206,283**	**100%**	**34,317**	**20%**
Trajectory to AB 1279 for Year 2050	25,795	-85%	**Does Not Achieve Target**	**–**	**–**	**–**
Service Population (SP)	49,360		74,030		24,670	50%
$MTCO_2e$/SP	3.5		2.8		-0.7	-20%

Source: See Appendix D
Notes: Emissions may not total to 100 percent due to rounding. Based on GWPs in the IPCC Fifth Assessment Report (AR5).

As shown in Table 5.8-5, buildout of the land uses accommodated under the Moorpark General Plan 2050 would result in a net increase of GHG emissions from existing conditions. However, GHG emissions per service population (SP) would decrease. The primary reason for the decrease in GHG emissions per service SP is due to regulations adopted to reduce GHG emissions and turnover of California's on-road vehicle fleets.

Consistency with the State's GHG Reduction Targets and Carbon Neutrality Goals

Though the proposed project would generate an increase in GHG emissions from the CEQA baseline in the 2050 horizon year forecast, this EIR also analyzes the potential for the project to conflict with the GHG reduction goals established under AB 1279 and EO B-55-18. This EIR assumes that the CEQA baseline reflects the AB 32 goal in 2020. As a result, at the Moorpark General Plan 2050 horizon year, the City would need to reduce GHG emissions by 85 percent from existing conditions to ensure it is on a trajectory to achieve the long-term goal under AB 1279.

As shown in Table 5.8-5 and as discussed, it is anticipated that implementation of the Moorpark General Plan 2050 would result in an overall net increase in emissions in horizon year 2050 compared to existing baseline. The GHG emissions increase is 20 percent more than the CEQA baseline and not the 85 percent reduction necessary to ensure the City is on a trajectory to achieve the long-term year 2045 reduction goal of AB 1279. Reduction strategies to meet the long-term 2045 GHG reduction goal in addition to establishment of a 2050 reduction target would be included in the planned future updates to the Climate Action Plan. Additionally, state strategies to achieve post-2030 targets would be necessary. Therefore, until such time, GHG emissions

impacts for the Moorpark General Plan 2050 are considered potentially significant regarding meeting the long-term year 2045 reduction goal.

General Plan Policies That May Reduce GHG Emissions

As identified in Table 5.8-5, the majority of emissions are from on-road transportation (26 percent) and building natural gas usage (26 percent). While growth in the city would cumulatively contribute to GHG emissions impacts, implementation of the Moorpark General Plan 2050 policies could also help minimize energy and mobile-source emissions (see Section 5.8.4, *Relevant General Plan Policies*). Conservation Element Policy COS-8.1; Land Use Element Policies LU-8.1 through LU-8.2, Circulation Element Policies CI-4.1 through CI-4.10, and CI-13.7 would reduce GHG and energy emissions. Land Use Element Policies LU-4.1 through 4.7 and Circulation Element Policies CI-6.1 and CI-6.3; and Conservation Element Policies COS-1.3 to COS-1.4, COS-2.2 through COS-2.4, and COS-6.1 through COS-6.4 would aid in reducing VMT and emissions. The Conservation Element Policies COS-5.1 through COS-5.1 would reduce water use and wastewater generation. The Conservation Element Policies COS-6.1 through COS-6.4 would reduce solid waste disposal and increase recycling and composting. Conservation Element Policies COS-7.1 and COS-7.3 would increase carbon stock and sequestration in the City. The Moorpark General Plan 2050 Conservation Element policies under Goal 1, Air Quality (Policies COS-1.1 through COS-1.8) would reduce regional air pollutant emissions in the city and would result in GHG emissions reduction co-benefits.

The primary mechanism by which local jurisdictions can ensure consistency with the State GHG reduction goals is through preparation of a Climate Action Plan. Conservation Element Policy COS-8.2 would require the city cooperate with regional partners to develop and implement a Climate Action Plan:

- **Policy COS-8.2 Climate action plan.** Work collaboratively with regional agencies, neighboring cities, community- based organizations, businesses, and other partners, as appropriate, to develop and implement a Climate Action Plan to address statewide GHG reduction and elimination goals, including those of Assembly Bill 1279, Executive Order B-55-18, Senate Bill 32, and Executive Order S-03-05.

The Moorpark General Plan 2050 also includes the following implementation actions to achieve the policies under Conservation Element Goal 8:

- **Greenhouse Gas (GHG) Emissions Reduction.** In coordination with regional agencies and community partners, prepare and implement a Climate Action Plan or equivalent approach to identify current and future sources and quantifies of local GHG emissions and strategies to reduce Moorpark's GHG emissions to levels consistent with State reduction goals, including providing opportunities to reduce emissions from all relevant sources and activities.

- **City Operations.** Limit greenhouse gas emissions from city operations by reducing idling and trips by city staff and city vehicles, routing city staff and city vehicles for efficiency, and increasing the use of public transportation, carpooling, and electric vehicles and low or no carbon modes of transportation by city staff.

- **Codes and Ordinances.** Implement and periodically review and update Municipal Codes and Ordinances to ensure compliance the state and federal regulations and best practices including, but not limited to, sustainable development and infrastructure, energy efficiency, renewable energy, electric vehicle charging infrastructure, reduction of greenhouse gas emissions, increasing resilience to the impacts of climate change, and supporting the health of local wildlife populations.

Summary

While energy sector emissions would increase overall under the Moorpark General Plan 2050 due to the forecast growth in population, it is anticipated that policies proposed under the proposed project would reduce energy sector emissions through increasing energy efficiency, energy conservation, and use of renewable energy. Implementation of these policies and other proposed policies of the Moorpark General Plan 2050 would contribute to minimizing GHG emissions associated with the city to the extent feasible. However, as described and shown in Table 5.8-5, GHG emissions are projected to increase 20 percent more than the CEQA baseline and not result in the 85 percent reduction from existing conditions necessary to ensure the City is on a trajectory to achieve the long-term reductions goals AB 1279 and substantial progress toward the State's carbon neutrality goals for year 2045. Although the Moorpark General Plan 2050 includes a new Conservation Element policy that requires that the city cooperate with regional partners to develop and implement a Climate Action Plan and implementation measures to support this goal, it is uncertain whether these policies will, in effect, lower the City's GHG emissions to a less-than-significant level. Therefore, GHG emissions associated with the proposed project are considered significant.

Level of Significance Before Mitigation: Potentially significant.

Impact 5.8-2: Implementation of the Moorpark General Plan 2050 would not conflict with an applicable plan, policy, or regulation of an agency adopted for the purpose of reducing GHG emissions. [Threshold GHG-2])

Applicable plans adopted for the purpose of reducing GHG emissions include CARB's Scoping Plan and SCAG's Connect SoCal. A consistency analysis with these plans is presented below.

CARB Scoping Plan

CARB's Scoping Plan is applicable to state agencies but is not directly applicable to cities/counties and individual projects (i.e., the Scoping Plan does not require local jurisdictions to adopt its policies, programs, or regulations to reduce GHG emissions). However, new regulations adopted by the State agencies from the Scoping Plan result in GHG emissions reductions at the local level. So local jurisdictions benefit from reductions in transportation emissions rates, increases in water efficiency in the building and landscape codes, and other statewide actions that affect a local jurisdiction's emissions inventory from the top down. Statewide strategies to reduce GHG emissions include the low carbon fuel standard, changes in the corporate average fuel economy standards, RPS, and triannual updates to the California building codes.

The GHG emissions shown in Table 5.8-5 includes reductions associated with statewide strategies that have been adopted since AB 32, SB 32, and EO B-55-18. Development projects accommodated under the

proposed project are required to adhere to the programs and regulations identified by the Scoping Plan and implemented by state, regional, and local agencies to achieve the statewide GHG reduction goals of AB 32, SB 32, and EO B-55-18. Future development projects would be required to comply with these state GHG emissions reduction measures because they are statewide strategies. For example, new buildings associated with land uses accommodated by implementing the proposed project would be required to meet the CALGreen and Building Energy Efficiency Standards in effect at the time when applying for building permits. Furthermore, as discussed under the discussion for Impact 5.8-1, the proposed project includes policies that would help reduce GHG emissions and therefore help achieve GHG reduction goals. Implementation of the proposed project would not obstruct implementation of the CARB Scoping Plan, and impacts would be less than significant.

SCAG's Connect SoCal

Connect SoCal is Southern California's regional transportation plan to achieve the passenger vehicle emissions reductions identified under SB 375. Connect SoCal was adopted in September 2020. Connect SoCal's "core vision" centers on maintaining and better managing the transportation network for moving people and goods while expanding mobility choices by locating housing, jobs, and transit closer together and increasing investment in transit and complete streets. Moreover, Connect SoCal identifies areas in the region that can house near-term and long-term growth and support a diverse economy and workforce. By integrating the Forecast Development Pattern with a suite of financially constrained transportation investments, Connect SoCal can reach the regional target of reducing GHGs from autos and light-duty trucks by 8 percent per capita by 2020, and 19 percent by 2035 (compared to 2005 levels) (SCAG 2020).

As demonstrated in Section 5.11, *Land Use and Planning*, the Moorpark General Plan 2050 would be consistent with the Connect SoCal goals (see Table 5.11-1, *Consistency with SCAG's Connect SoCal*). Circulation Element-Mobility Policies CI-2.2, CI-6.1, and CI-6.3 as well as Conservation Element Policies COS-1.2, COS-1.3, COS-1.4, COS-1.6, and COS-9.1 would reduce VMT per service population consistent with the regional goals. Furthermore, as discussed in Section 5.14, *Population and Housing,* implementation of the Moorpark General Plan 2050 would bring the city closer to a more equal distribution of employment and housing. Thus, the proposed project would provide for residents to both live and work in the city instead of commuting to other areas, which would contribute to minimizing VMT and reducing VMT per service population. Therefore, the proposed project would not interfere with SCAG's ability to implement the regional strategies in Connect SoCal, and no impact would occur.

Level of Significance Before Mitigation: Less than significant.

5.8.4 Relevant General Plan Policies

Land Use Element

- **Policy LU-3.6 Industries and jobs.** Prioritize the development of industries that have limited emissions, meet local, regional, and state air and water pollution control goals and standards, and are designed to be compatible with surrounding land uses.

- **Policy LU-3.7 Transit-oriented development.** Promote opportunities to develop uses that can economically benefit from their proximity to the Moorpark Metrolink station and promote increased ridership.

- **Policy LU-4.1 Sustainable urban form.** Provide an overall pattern of land uses that promotes efficient development; reduces automobile dependence, greenhouse gas emissions; and consumption of non-renewable resources; ensures compatibility among uses; enhances community livability and health; and sustains economic vitality.

- **Policy LU-4.2: Focused development.** Reinforce existing patterns of development by concentrating development in key centers and districts serving as destinations and gathering places for the community that are linked by pedestrian connections to adjoining residential neighborhoods, such as the downtown High Street corridor, Mission-Bell/Moorpark Town Center, and Moorpark Marketplace.

- **Policy LU-4.3 Residential neighborhoods.** Maintain a development pattern of distinct residential neighborhoods oriented around parks, schools, and community facilities that are connected with neighborhood-serving businesses and public transit.

- **Policy LU-4.4 Multi-family housing.** Promote the development of multiple-family dwellings in close proximity to employment opportunities, shopping areas, public parks, and transit lines, with careful consideration of the proximity to and compatibility with single-family neighborhoods.

- **Policy LU-4.5 Community-serving uses.** Encourage uses that meet the daily needs of residents such as grocery stores, local-serving restaurants, and service businesses to be located within safe walking distance of residents.

- **Policy LU-4.6 Highway-oriented development.** Cluster commercial development in compact areas along major roadways and provide pedestrian links to adjacent residential areas.

- **Policy LU-4.7 Moorpark College community.** Promote the long-term development of commercial uses and housing in proximity to Moorpark College.

- **Policy LU-8.1 Model of environmental sustainability.** Establish Moorpark as a leader of land use development practices that contribute to the sustainability and stewardship of environmental resources including air quality protection, energy and water efficiency, natural resource conservation, greenhouse gas reduction, and climate change resiliency..

- **Policy LU-8.2 Reduction of energy and water use.** Encourage developers to exceed standards for building design and construction specified by the California Green Building Standards Code, with goals of achieving net zero energy and water use.

- **Policy LU-8.7 Habitat protection.** Encourage public and private projects to be located and designed to preserve significant habitats, vegetation, and other significant educational, scientific, scenic, resources of

social value, protect air quality, and reduce greenhouse gas emissions as specified by the Conservation, Open Space and Recreation Element.

- **Policy LU-13.7 Connections with neighborhoods and districts.** Require the development of external cross-connections between commercial uses so as to reduce the number of curb cuts and number of vehicle trips on adjacent roadways.
- **Policy LU-14.2 Managed truck access.** Require that automobile and truck access to commercial properties be located so as to minimize impacts to adjacent uses.
- **Policy LU-16.9 Alternative energy infrastructure.** Encourage large scale industrial development projects, as defined in the Municipal Code, to provide on-site alternative energy sources and containment of stormwater runoff.
- **Policy LU-19.5 Tree canopy.** Maintain and expand the tree canopy in the downtown area to provide shade, improve air and water quality, reduce the heat island effect, and create habitat for birds and pollinators.

Circulation Element

- **Policy CI-1.1 Multimodal transportation.** Require that the planning, design, and construction of all transportation projects consider the needs for all modes of travel to create safe, livable, and inviting environments for motorists, pedestrians, bicyclists, and public transit users of all ages and abilities.
- **Policy CI-1.2 Complete streets.** Design, plan, maintain, and operate streets using complete streets[1] principles for all types of transportation projects including design, planning, construction, maintenance, and operations of new and existing streets and facilities. Encourage street connectivity that aims to create a comprehensive, integrated, connected network for all modes.
- **Policy CI-2.2 Environmental impact threshold.** Maintain thresholds for the determination of environmental impacts for proposed residential, commercial, and industrial uses of a minimum reduction of per capita vehicle miles travelled (VMT) of 15% below existing and no net increase in per capita VMT compared to existing for all other land use types. Periodically review and adjust this threshold as appropriate in consideration of actual vehicle miles and greenhouse gas emissions resulting from implementation of the Land Use Plan.
- **Policy CI-2.3 VMT analysis.** Require the analysis of VMT per resident and/or per employee as part of CEQA environmental review, and development of a mitigation program to reduce any significant impacts consistent with State law.
- **Policy CI-2.4 VMT reduction.** Work to reduce VMT through land use planning, enhanced transit access, localized attractions that reduce the need for travel to adjoining communities, and improved access to non-vehicular modes of transportation.

- **Policy CI-5.1 New bicycle and pedestrian facilities.** Prioritize plans for new bicycle and pedestrian facilities to provide continuity and close gaps in the bikeway and sidewalk network.
- **Policy CI-5.2 Improvements to bikeway network.** Require proposed residential, commercial, and industrial developments to include bikeways in their street improvement plans, consistent with the Circulation Element Bikeway Network Plan (Figure 6) and construct pertinent improvements.
- **Policy CI-5.3 Funding for bikeways.** Require development projects to incorporate or participate in the funding of planned bikeways that allow the community to utilize bicycles as an alternative to automobiles.
- **Policy CI-6.1 Employer incentives.** Encourage businesses to provide incentives for employees to utilize alternatives to the conventional automobile transportation to reduce energy consumption, noise pollution, air pollution, and greenhouse gas emissions, such as shared ride programs, parking cash out, transit benefits, allowing telecommuting and alternative work schedules.
- **Policy CI-6.3**: **Ventura County Air Pollution Control District.** Support the Ventura County Air Pollution Control District in its effort to implement transportation demand management strategies.
- **Policy CI-6.4 TDM fund expenditure.** The City shall develop a program for expending transportation demand management funds collected as mitigation for project air quality impacts.

Conservation Element

- **Policy COS-1.1 Air quality coordination.** Cooperate and participate with Ventura County Air Pollution Control District, Southern California Association of Governments, and the California Air Resources Board, in regional air quality management plans, programs, enforcement measures and mitigation measures designed to reduce and/or minimize the amount of primary and secondary air pollutants.
- **Policy COS-1.2 Infill development.** Promote infill development to facilitate walking and use of alternative transportation modes and reduce vehicle trips and air emissions.
- **Policy COS-1.3 Development siting.** Require that development be located and designed to reduce the number of vehicle trips generated and air emissions.
- **Policy COS-1.4 Low-emission transportation.** Encourage the use of zero-emission vehicles, low-emission vehicles, bicycles and other non-motorized vehicles, and car-sharing programs by requiring sufficient and convenient infrastructure and parking facilities in residential developments and employment centers to accommodate these vehicles.
- **Policy COS-1.5 Low-emission fleet.** Purchase low-emission vehicles for the City's fleet and to use available clean fuel sources for trucks and heavy equipment.
- **Policy COS-1.6 Clean City transportation options.** Promote reduced idling, trip reduction, routing for efficiency, and the use of public transportation, carpooling, and alternate modes of transportation for City operations.

- **Policy COS-1.7 Air quality education.** Educate the public about air quality standards, health effects, and efforts they can make to improve air quality and reduce greenhouse gas emissions in the region.
- **Policy COS-1.8 Local air quality concerns.** Work with the development community, local businesses, residents, regulatory bodies, and other stakeholders to minimize air pollution, clean ambient air quality, and minimize objectionable odors generated by vehicles, major emitters, agricultural uses, and other land uses.
- **Policy COS-4.1 New building energy efficiency.** Encourage new buildings to exceed state energy efficiency requirements where cost-effective and equitable, including through the use of improved insulation, all-electric heating and cooling systems, and high-efficiency appliances.
- **Policy COS-4.2 Passive energy conservation.** Require that buildings in large scale commercial, mixed-use, and planned development projects include, to the extent feasible, passive energy-conservation strategies including, but not limited to, location and orientation.
- **Policy COS-4.3 Energy efficiency improvements.** Work with property owners to conduct energy efficiency retrofits and other improvements to existing buildings, particularly rental units and buildings constructed before 1980. Emphasize ways to improve the energy efficiency of existing buildings that are equitable and cost-effective.
- **Policy COS-4.4 Low-cost energy efficiency.** Enact widespread energy efficiency and conservation practices that are accessible and feasible for most or all of the community, including low-cost and free actions and those with accelerated payback periods.
- **Policy COS-4.5: Carbon-free transition.** Transition to low-carbon and carbon-free energy sources for homes and nonresidential buildings.
- **Policy COS-4.6 On-site renewable energy.** Increase the installation of on-site renewable energy systems in all new and existing developments with the capacity to support these systems, enforcing the renewable energy requirements of the California Building Standards Code and encouraging buildings not covered by state requirements to install renewable energy systems.
- **Policy COS-4.7 Energy storage systems.** Encourage new and existing developments to install energy storage systems, particularly for developments in Very High Fire Hazard Severity Zones and for developments providing essential community services.
- **Policy COS-4.8 Energy use at City facilities.** Retrofit City facilities to improve energy efficiency, decrease electric and natural gas use, and install renewable energy and energy storage systems.
- **Policy COS-4.9 Green building practices.** Provide information about, and encourage, incorporating additional green building practices into new development and major retrofits, including active and passive energy-conservation strategies, low-carbon, sustainable building materials, and reuse of building materials.

- **Policy COS-4.10 Regional energy collaboration.** Collaborate with the Ventura County Regional Energy Alliance, the Clean Power Alliance, and other regional energy groups to promote educational campaigns and financial incentives for energy efficiency and conservation, renewable energy, and energy storage.
- **Policy COS-5.1 Drought-tolerant landscaping.** Provide education and grant programs to encourage replacement of lawns and other water-intensive landscaping with drought-tolerant landscaping, especially landscaping incorporating native species and xeriscaping.
- **Policy COS-5.2 Water reuse.** Encourage property owners to install rainwater catchment and greywater systems in new developments or major retrofits.
- **Policy COS-5.4 Low-cost water efficiency.** Continue to work with water providers to educate community members about low-cost water efficiency improvements in homes and businesses.
- **Policy COS-5.5 Net zero water use.** Encourage developers to design new structures and property landscapes to achieve net zero water use, to the extent feasible.
- **Policy COS-6.1 Waste sorting education.** Improve education efforts on waste sorting for community members.
- **Policy COS-6.2 Recycling and composting access.** Expand access to recycling and composting services for homes and businesses.
- **Policy COS-6.3 Single-use plastics.** Explore options to decrease the use of single-use plastics and encourage the use of reusable materials.
- **Policy COS-6.4 Food waste.** Discourage food waste and remove barriers to donating food and composting.
- **Policy COS-7.1 Tree plantings.** Protect and expand the urban forest through new tree plantings and effective and timely care of existing trees, emphasizing consistent tree canopies along corridors in areas such as along Moorpark Avenue and Los Angeles Avenue and within the Downtown area.
- **Policy COS-7.3 Carbon sequestration for working lands.** Increase opportunities to sequester carbon on agricultural land and open space.
- **Policy COS-8.1 Greenhouse gas reduction.** Reduce community-wide and City operations greenhouse gas (GHG) emissions from vehicles, residential, and nonresidential energy use, waste generation, water and wastewater collection and treatment, off-road uses, and other GHG emission sources to meet or exceed the State's goal to achieve carbon neutrality by 2045.
- **Policy COS-8.2 Climate action plan.** Work collaboratively with regional agencies, neighboring cities, community- based organizations, businesses, and other partners, as appropriate, to develop and

implement a Climate Action Plan to address statewide GHG reduction and elimination goals, including those of Assembly Bill 1279, Executive Order B-55-18, Senate Bill 32, and Executive Order S-03-05

5.8.5 Level of Significance Before Mitigation

Upon implementation of regulatory requirements and standard conditions of approval, some impacts would be less than significant: 5.8-2.

Without mitigation, these impacts would be **potentially significant**:

- **Impact 5.8-1** Implementation of the Moorpark General Plan 2050 would result in a substantial increase in emissions and would not place the City on a trajectory to achieve the goals established under AB 1279 or achieve progress toward the State's carbon neutrality goal.

5.8.6 Mitigation Measures

Impact 5.8-1

The Moorpark General Plan 2050 includes a new Conservation Element Policy COS-8.2, which would require the city to cooperate with regional partners to develop and implement a Climate Action Plan to achieve the GHG reduction targets of SB 32 and AB 1279. The Climate Action Plan would outline additional measures new development should take to ensure that the city is consistent with the State's carbon neutrality goals.

5.8.7 Level of Significance After Mitigation

Impact 5.8-1

Implementation of the Moorpark General Plan 2050 Conservation Element Policy COS-8.2 would ensure that the city cooperates with regional partners to develop and implement a Climate Action Plan to achieve the GHG reduction goals of SB 32 and chart a trajectory to achieve the long-term GHG reduction goal set by AB 1279 and substantial progress toward the State's carbon neutrality goals for year 2045. However, given the growth in population and employment within the city and the magnitude of emissions reductions needed to achieve the GHG reduction target, it is uncertain whether Conservation Element Policy COS-8.2 would lower GHG emissions to less-than-significant levels. Therefore, GHG emissions are considered **significant and unavoidable**.

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5.9 HAZARDS AND HAZARDOUS MATERIALS

This section of the Draft Environmental Impact Report (DEIR) evaluates the potential impacts of the proposed project on human health and the environment due to exposure to hazardous materials or conditions associated with the project site, project construction, and project operations. Potential project impacts and appropriate mitigation measures or standard conditions are included as necessary. An evaluation of wildfire hazards is in Section 5.20, *Wildfire*.

5.9.1 Environmental Setting

5.9.1.1 REGULATORY BACKGROUND

Hazardous Materials and Waste

Hazardous materials refer generally to hazardous substances that exhibit corrosive, poisonous, flammable, and/or reactive properties and have the potential to harm human health and/or the environment. Hazardous materials are used in products (household cleaners, industrial solvents, paint, pesticides, etc.) and in the manufacturing of products (e.g., electronics, newspapers, plastic products). Hazardous materials can include petroleum, natural gas, synthetic gas, acutely toxic chemicals, and other toxic chemicals that are used in agriculture, commercial, and industrial uses; businesses; hospitals; and households. Accidental releases of hazardous materials can happen from a variety of causes, including highway incidents, warehouse fires, train derailments, shipping accidents, and industrial incidents.

There are many federal, state, and local programs that regulate the use, storage, and transportation of hazardous materials and hazardous waste, and they are constantly changing. Federal and state statutes as well as local ordinances and plans regulate hazardous waste management. These regulations can reduce the danger that hazardous substances pose to people and businesses under normal daily circumstances and as a result of emergencies and disasters.

Resource Conservation and Recovery Act

The Resource Conservation and Recovery Act (RCRA) of 1976 is the principal federal law that regulates the generation, management, and transportation of waste. Hazardous waste management includes the treatment, storage, or disposal of hazardous waste. Treatment is any process that changes the physical, chemical, or biological character of the waste to reduce its potential as an environmental threat. Treatment can include neutralizing the waste, recovering energy or material resources from the waste, rendering the waste less hazardous, or making the waste safer to transport, dispose of, or store.

The RCRA gave the US Environmental Protection Agency (EPA) the authority to control hazardous waste from "cradle to grave," that is, from generation to transportation, treatment, storage, and disposal. The RCRA also sets up a framework for the management of nonhazardous wastes. The 1986 amendments to RCRA enabled the EPA to address environmental problems that could result from underground tanks storing petroleum and other hazardous substances. It should be noted that RCRA focuses only on active and future facilities and does not address abandoned or historical sites. The federal Hazardous and Solid Waste

Amendments are the 1984 amendments to RCRA that required phasing out land disposal of hazardous waste. Some of the other mandates of this strict law include increased enforcement authority for the EPA, more stringent hazardous waste management standards, and a comprehensive underground storage tank program.

Comprehensive Environmental Response, Compensation, and Liability Act

The Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA) is a law developed to protect the water, air, and soil resources from the risks created by past chemical disposal practices. This law is also referred to as the Superfund Act and regulates sites on the National Priority List, which are called Superfund sites. This law provides broad federal authority to respond directly to releases or threatened releases of hazardous substances that may endanger public health or the environment (US Code Title 42, Chapter 103). CERCLA establishes requirements concerning closed and abandoned hazardous waste sites; provides for liability of persons responsible for releases of hazardous waste at these sites; and establishes a trust fund to provide for cleanup when no responsible party can be identified.

Superfund Amendments and Reauthorization Act

The Superfund Amendments and Reauthorization Act (SARA) reauthorized CERCLA to continue cleanup activities around the country. Several site-specific amendments, clarifications, and technical requirements were added to the legislation, including additional enforcement authorities. Title III of SARA also authorized the Emergency Planning and Community Right-to-Know Act.

Emergency Planning and Community Right to Know Act

The Emergency Planning and Community Right to Know Act (EPCRA) was enacted by Congress as the national legislation on community safety. The act required the establishment of state commissions, planning districts, and local committees to facilitate the preparation and implementation of emergency plan. Under its requirements, local emergency planning committees (LEPC) are responsible for developing a plan for preparing for and responding to a chemical emergency, including:

- An identification of local facilities and transportation routes where hazardous materials are present.
- The procedures for immediate response in case of an accident (this must include a community-wide evacuation plan).
- A plan for notifying the community that an incident has occurred.
- The names of response coordinators at local facilities.
- A plan for conducting drills to test the plan.

The emergency plan is reviewed by the State Emergency Response Commission and publicized throughout the community. The LEPC is required to review, test, and update the plan each year. The Ventura County Resource Management Agency, Environmental Health Division (VCRMA) is responsible for coordinating hazardous material and disaster preparedness planning and appropriate response efforts with city

departments and local and state agencies. The goal is to improve public and private sector readiness and to mitigate local impacts resulting from natural or human-made emergencies.

Another purpose of the EPCRA is to inform communities and citizens of chemical hazards in their areas. Sections 311 and 312 of EPCRA require businesses to report to state and local agencies the location and quantities of chemicals stored on-site. Under section 313, manufacturers are required to report chemical releases for more than 600 designated chemicals. In addition to chemical releases, regulated facilities are required to report off-site transfers of waste for treatment or disposal at separate facilities, pollution prevention measures, and chemical recycling activities. The EPA maintains the Toxic Release Inventory database, which documents the information that regulated facilities are required to report annually.

Toxic Substances Control Act

The Toxic Substances Control Act of 1976 was enacted by Congress to give the EPA the ability to track the 75,000 industrial chemicals currently produced or imported into the United States. The EPA repeatedly screens these chemicals and can require reporting or testing of any that may pose an environmental or human health hazard. It can ban the manufacture and import of chemicals that pose an unreasonable risk. Also, the EPA has mechanisms in place to track the thousands of new chemicals that industry develops each year with either unknown or dangerous characteristics. It then can control these chemicals as necessary to protect human health and the environment. The act supplements other federal statutes, including the Clean Air Act and the Toxic Release Inventory under EPCRA.

Hazardous Materials in Structures: Asbestos-Containing Materials and Lead-Based Paint

Several regulations and guidelines pertain to abatement of and protection from exposure to asbestos-containing materials (ACM) and lead-based paint (LBP), including Construction Safety Orders 1529 (for ACM) and Section 1532.1 (for LBP) from Title 8 of the California Code of Regulations, and Part 61, Subpart M, of the Code of Federal Regulations (for ACM). In California, ACM and LBP abatement must be performed and monitored by contractors with appropriate certification from the California Department of Health Services. Asbestos is also regulated as a hazardous air pollutant under the Clean Air Act and a potential worker safety hazard under the authority of the State Division of Occupational Safety and Health (Cal/OSHA).

Requirements for limiting asbestos emissions from building demolition and renovation are specified in the Ventura County Air Pollution Control District's Rule 62.7 (Asbestos: Demolition and Renovation). California Government Code Sections 1529 and 1532.1 provide for exposure limits, exposure monitoring, respiratory protection, and good working practice by workers exposed to lead and ACMs.

Business Plan Act

Both the federal government[1] and the State of California[2] require all businesses that handle more than a specified amount of hazardous materials or extremely hazardous materials—i.e., a reporting quantity—to submit a hazardous materials business plan to the local certified Unified Program agency (CUPA).

A business plan must be submitted by businesses that handle a hazardous material or a mixture containing a hazardous material in quantities equal to or greater than:

- 500 pounds of a solid
- 55 gallons of a liquid
- 200 cubic feet of a compressed gas at standard temperature and pressure
- The federal Threshold Planning Quantity for Extremely Hazardous Substances
- Radioactive materials in quantities for which an emergency plan is required as per Parts 30, 40, or 70 of the Code of Federal Regulations, Title 10, Chapter 1

The Business Plan must include the type and quantity of hazardous materials, a site map, risks of using these materials, spill prevention, emergency response, employee training, and emergency contacts.

Hazardous Materials Transportation

Section 31303 of the California Vehicle Code and the US Department of Transportation regulate hazardous materials transport. The California Highway Patrol and California Department of Transportation are the enforcement agencies. The California Office of Emergency Services provides emergency response services involving hazardous materials incidents.

Hazardous Materials Incident Response

Under Title III of SARA, the LEPC is responsible for developing an emergency plan for preparing for and responding to chemical emergencies. This emergency plan must include:

- An identification of local facilities and transportation routes where hazardous materials are present.
- The procedures for immediate response in case of an accident (must include a community-wide evacuation plan).
- A plan for notifying the community that an incident has occurred.

[1] Code of Federal Regulations, EPA, SARA, and Title III.
[2] California State Health and Safety Code, Division 20, Chapter 6.95, §§ 25500–25520; California Code of Regulations, Title 19, Chapter 2, Sub-chapter 3, Article 4, §§ 2729–2734.

- The names of response coordinators at local facilities.
- A plan for conducting exercises to test the plan.

The plan is reviewed by the state emergency response commission (SERC) and publicized throughout the community. The LEPC is required to review, test, and update the plan each year. The VCRMA is responsible for coordinating hazardous material coordination and inspection in Moorpark.

Hazardous Material Spill/Release Notification Guidance

All significant spills, releases, or threatened releases of hazardous materials must be immediately reported. Federal and state emergency notification is required for all significant releases of hazardous materials. Requirements for immediate notification of all significant spills or threatened releases cover owners, operators, persons in charge, and employers. Notification is required regarding significant releases from facilities, vehicles, vessels, pipelines, and railroads. Many state statutes require emergency notification of a hazardous chemical release:

- Health and Safety Codes Sections 25270.7, 25270.8, and 25507
- Vehicle Code Section 23112.5
- Public Utilities Code Section 7673, (PUC General Orders #22-B, 161)
- Government Code Sections 51018, 8670.25.5 (a)
- Water Code Sections 13271, 13272
- California Labor Code Section 6409.1 (b)10

In addition, all releases that result in injuries or workers harmfully exposed must be immediately reported to Cal/OSHA (California Labor Code Section 6409.1 [b]). For additional reporting requirements, also refer to the Safe Drinking Water and Toxic Enforcement Act of 1986, better known as Proposition 65, and Section 9030 of the California Labor Code.

The California Accidental Release Prevention (CalARP) program became effective on January 1, 1997, in response to Senate Bill 1889, replacing the California Risk Management and Prevention Program. Under CalARP, the Governor's Office of Emergency Services must adopt implementing regulations and seek delegation of the program from the EPA. CalARP aims to be proactive and therefore requires businesses to prepare risk management plans, which are detailed engineering analyses of the potential accident factors at a business and the mitigation measures that can be implemented to reduce accident potential. In most cases, local governments have the lead role for working directly with businesses in this program. The VCRMA is the CUPA designated as the administering agency for CalARP.

Responsible agencies that regulate hazardous materials and waste include:

- **United States EPA.** The EPA is the primary federal agency that regulates hazardous materials and waste. In general, the EPA works to develop and enforce regulations that implement environmental laws enacted by Congress. The agency is responsible for researching and setting national standards for a variety of environmental programs, and delegates to states and tribes the responsibility for issuing

permits and for monitoring and enforcing compliance. EPA programs promote handling hazardous wastes safely, cleaning up contaminated land, and reducing trash. Under the authority of the RCRA and in cooperation with state and tribal partners, the Waste Management Division manages a hazardous waste program, an underground storage tank program, and a solid waste program that includes development of waste reduction strategies such as recycling.

- **California EPA.** CalEPA was created in 1991 by Governor's Executive Order. Six boards, departments, and an office were placed under the CalEPA umbrella to create a cabinet-level voice for the protection of human health and the environment and to ensure the coordinated deployment of state resources. CalEPA oversees hazardous materials and hazardous waste compliance throughout California.

- **California Department of Toxic Substances Control.** The DTSC is a department of CalEPA, which authorizes DTSC to carry out the RCRA program in California to protect people from exposure to hazardous wastes. The department regulates hazardous waste, cleans up existing contamination, and looks for ways to control and reduce the hazardous waste produced in California primarily under the authority of RCRA and in accordance with the California Hazardous Waste Control Law (California Health and Safety Code Division 20, Chapter 6.5) and the Hazardous Waste Control Regulations (Title 22, California Code of Regulations, Divisions 4 and 4.5). Permitting, inspection, compliance, and corrective action programs ensure that people who manage hazardous waste follow state and federal requirements and other laws that affect hazardous waste specific to handling, storage, transportation, disposal, treatment, reduction, cleanup, and emergency planning. DTSC also maintains a Site Mitigation and Brownfields Reuse Program Database. Under the DTSC, the Statewide Compliance Division administers the technical implementation of the state's Unified Program, a consolidation of six environmental programs at the local level. This program was established under the amendments to the California Health and Safety Code made by Senate Bill 1082 in 1994. The six programs that make up the Unified Program are:

  - Hazardous Materials Business Plan/Emergency Response Plan
  - Hazardous Waste/Tiered Permitting
  - Underground Storage Tanks
  - Aboveground Storage Tanks Spill Prevention Control and Countermeasures
  - California Accidental Release Prevention Program (CalARP)
  - Uniform Fire Code Hazardous Materials Management Plan

The Statewide Compliance Division conducts triennial reviews of Unified Program agencies to ensure their programs are consistent statewide, conform to standards, and deliver quality environmental protection at the local level. It also carries out the inspections, enforcement, and complaint response at the state's hazardous waste generators, facilities, and transporters and oversees the hazardous waste generator and on-site waste treatment surveillance and enforcement program carried out by local Unified Programs.

- **Certified Unified Program Agency.** A CUPA is a local agency that has been certified by CalEPA to implement the local Unified Program. The CUPA can be a county, city, or joint powers authority. A

participating agency is a local agency that has been designated by the local CUPA to administer one or more Unified Programs within the jurisdiction on behalf of the CUPA. A designated agency is a local agency that has not been certified by CalEPA but is the responsible local agency that would implement the six Unified Programs until it is certified. The Unified Program is related to the SERC and LEPCs that were established under both federal (EPCRA) and state authority relative to the Hazardous Materials Business Plan/Emergency Response Plan. While the CUPA structure does not specifically incorporate the SERC and LEPCs, both SERC and CUPA have found it beneficial to establish strong communication and coordination on hazardous materials issues. The CUPA board now has a representative on the SERC, and members of LEPCs are also CUPA board members. Common issues include ensuring that hazardous materials, waste, and tank programs maintain strong coordination and communication for maximum consistency in program implementation. Shared data, joint resources, common forms, provision of emergency information, and regulatory review are other interests that are coordinated by the CUPA board and SERC/LEPCs. The VCRMA is designated by the state as the CUPA for the County of Ventura. The VCRMA focuses on the management of specific environmental programs at the local government level to address the disposal, handling, processing, storage, and treatment of local hazardous materials and waste products. The CUPAs are also responsible for implementing the leak prevention element of the Underground Storage Tank (UST) Program.

Programs that regulate hazardous materials and waste include:

- **UST Program.** Releases of petroleum and other products from USTs are the leading source of groundwater contamination in the United States. The RCRA Subtitle I established regulations governing the storage of petroleum products and hazardous substances in USTs and the prevention and cleanup of leaks. In EPA Region 9 (California, Arizona, Hawaii, Nevada, Pacific Islands, and over 140 tribal nations) the UST program operates primarily through state agency programs with EPA oversight. In California, the State Water Resources Control Board (SWRCB), under the umbrella of CalEPA, provides assistance to local agencies enforcing UST requirements. The purpose of the UST program is to protect public health and safety and the environment from releases of petroleum and other hazardous substances. The program consists of four elements: leak prevention, cleanup, enforcement, and tank tester licensing. In September 2004, the SWRCB adopted regulations that require electronic submittal of information for groundwater cleanup programs, including groundwater analytical data, the surveyed locations of monitoring wells, and other data. The SWRCB's GeoTracker system currently has information submitted by responsible parties for over 10,000 leaking UST (LUST) sites statewide and has been extended to include all SWRCB groundwater cleanup programs, including the LUST, non-LUST (Spill, Leaks, Investigation, and Cleanup), Department of Defense, and landfill programs. The VCRMA is charged with the responsibility of conducting compliance inspections of regulated facilities in Ventura County. Regulated facilities handle hazardous materials, generate or treat hazardous waste, and/or operate an underground storage tank. All new installations of underground storage tanks require an inspection, along with the removal of the old tanks under strict chain-of-custody protocol.

- **Hazardous Waste Management.** VCRMA implements the Hazardous Waste Generator Program and the Hazardous Waste Treatment/Tiered Permit Program throughout Ventura County. The purpose of these programs is to ensure that all hazardous waste generated in Ventura County businesses is properly

handled, recycled, treated, stored, and disposed. Environmental Health staff in these programs inspect facilities that generate hazardous waste, investigate reports of illegal hazardous waste disposal, and respond to emergency spills of hazardous chemicals. Environmental Health staff also participate in public education programs designed to inform industries and residents about the laws and regulations regarding safe disposal of hazardous waste.

Emergency Preparedness

Emergency Management is part of the Ventura County Sheriff's Office of Emergency Services and works with all city departments, Ventura County Fire Department, school districts, the American Red Cross, other county departments and agencies, and surrounding cities to provide emergency preparedness and coordination when man-made and natural disasters occur.

Moorpark has prepared a draft emergency operations plan (EOP) to ensure the most effective allocation of resources for the maximum benefit and protection of the civilian population in time of emergency. The objective of the draft EOP is to incorporate and coordinate all available City resources into an efficient organization capable of responding to any emergency. Though no plan can completely prevent death and destruction, good plans carried out by knowledgeable and well-trained personnel will minimize losses. This plan establishes the emergency organization and assigns tasks and general procedures. It provides for coordination of planning efforts of the various emergency staff and service elements using the Standardized Emergency Management System and National Incident Management System with all levels of government.

Ventura County has a multi-jurisdictional hazard mitigation plan (MHMP). The MHMP includes resources and information to assist city residents, public- and private-sector organizations, and others interested in participating in planning for natural hazards. The MHMP provides a list of activities that may help Ventura County reduce risk and prevent loss from future natural hazard events. The MHMP identifies three primary hazard risk areas—wildfires, landslides, and earthquakes.

5.9.1.2 EXISTING CONDITIONS

Hazardous Materials Sites

Three environmental databases were searched on October 3, 2022, for listings in the City of Moorpark—GeoTracker, maintained by the State Water Resources Control Board; EnviroStor, maintained by the Department of Toxic Substances Control; and RCRAInfo, maintained by the EPA. Findings of the database searches are presented in Tables 5.9-1, *GeoTracker Sites in Moorpark*, 5.9-2, *EnviroStor Sites in Moorpark*, and 5.9-3, *RCRA Info Sites in Moorpark*.

Table 5.9-1 GeoTracker Sites in Moorpark

Type of Site	Status	Number of Sites
Leaking Underground Storage Tank (LUST)	Completed – Case Closed	36
	Total	**36**
Cleanup Program Site	Completed– Case Closed	7
	Open – Eligible for Closure	1
	Subtotal, Open Cases	**1**
	Total	**8**
Land Disposal Site	Completed – Case Closed	7
	Total	**7**
Produced Water Ponds	Completed – Case Closed	2
	Open – Inactive	1
	Subtotal, Open Cases	**1**
	Total	**3**
Permitted Underground Storage Tanks	NA	**11**
Waste Discharge Requirements	Historical WDR	11
	Draft WDR	1
	Active WDR	5
	Never Active WDR	4
	Subtotal, Draft, Active and Never Active Cases	**10**
	Total	**21**
	Grand Total	**86**

Source: SWRCB 2022.

Table 5.9-2 EnviroStor Sites in Moorpark

Type of Site	Status	Number of Sites
Tiered Permits	Refer: Other Agency	2
	Total	**2**
Inspection	No Action	1
	Total	**1**
Historical	No Further Action	1
	Total	**1**
School Investigation	No Action Required	1
	No Further Action	1
	Inactive - Withdrawn	1
	Total	**3**
	Grand Total	**7**

Source: DTSC 2022.

Table 5.9-3 RCRA Info Sites in Moorpark

Facility Name	Number of Sites
Transporter	4
Large Quantity Generators	10
Small Quantity Generators	34
Very Small Quantity Generators	4
Permitted Wastewater Discharging Facilities	21
Toxics Release Inventory (TRI)	10
Total	**83**

Source: USEPA 2022a, 2022b.
Notes: Large Quantity Generator (LQG): generates over 1,000 kg (2,205 pounds) of hazardous waste, or 1 kg (2.2 pounds) of acutely hazardous waste during any month within the year.
Small Quantity Generator (SQG): generates 100 to 1,000 kg (220.5 to 2,205 pounds) of hazardous waste per month
Very Small Generator (VSQG): generates less than 100 kg (220.5 pounds) of hazardous waste or one kilogram or less per month of acutely hazardous waste.

Asbestos

Asbestos is the name of a group of silicate minerals that are heat resistant and thus were commonly used as insulation and fire retardant. Inhaling asbestos fibers has been shown to cause lung disease (asbestosis) and lung cancer (mesothelioma). Beginning in the early 1970s, a series of bans was established by the EPA and the Consumer Product Safety Commission on the use of certain asbestos-containing materials in construction. Most US manufacturers voluntarily discontinued the use of asbestos in certain building products during the 1980s. Requirements for limiting asbestos emissions from building demolition and renovation activities are specified in Ventura County Air Pollution Control District's Rule 62.7 (Asbestos: Demolition and Renovation).

Lead

Lead was formerly used as an ingredient in paint (before 1978) and as a gasoline additive; both of these uses have been banned. Lead is listed as a reproductive toxin and a cancer-causing substance; it also impairs the development of the nervous system and blood cells in children. Those demolishing pre-1978 structures may presume the buildings contain lead-based paint without an inspection. Lead must be contained during demolition activities (California Health & Safety Code Sections 17920.10 and 105255).

Airport Hazards

Moorpark is located approximately 8.7 miles southeast of the Santa Paula Airport and approximately 10.3 miles east of the Camarillo Airport. Moorpark is not within an Airport Influence Area for either airport (Ventura County ALUC 2000). There are no private airstrips in the vicinity of Moorpark.

5.9.2 Thresholds of Significance

According to Appendix G of the CEQA Guidelines, a project would normally have a significant effect on the environment if the project would:

H-1 Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials.

H-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.

H-3 Emit hazardous emissions or handle hazardous or acutely hazardous materials, substance, or waste within one-quarter mile of an existing or proposed school.

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

H-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 result in a safety hazard or excessive noise for people residing or working in the project area.

H-6 Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.

H-7 Expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires.

5.9.3 Environmental Impacts

The following impact analysis addresses thresholds of significance for which the Initial Study disclosed potentially significant impacts. The applicable thresholds are identified in brackets after the impact statement.

Impact 5.9.1: Implementation of the Moorpark General Plan 2050 would not create a significant hazard to the public or the environment through the routine transport, use, and/or disposal of hazardous materials. [Thresholds H-1, H-2, and H-3]

Implementation of the Moorpark General Plan 2050 would facilitate potential new development of residential, mixed-use, commercial, industrial, agricultural, and recreational uses in Moorpark. Hazardous materials would be routinely used, transported, and handled throughout the city. Residential land uses could use common cleaning products, building maintenance products, paints and solvents, and fertilizers and pesticides used in landscaping and yard care, along with similar items. In general, these potentially hazardous materials would not occur in sufficient quantities to pose a significant hazard to public health and safety or to the environment.

Companies in the industrial or commercial land use designation of the Moorpark General Plan 2050 could use, store, or generate hazardous materials for research, manufacturing, cleaning, or other commercial uses, and the proposed project would include agricultural uses in Moorpark that may also use or transport hazardous materials such as pesticides. These commercial, industrial, and agricultural activities are subject to a variety of federal, state, and local laws, policies, and regulations, as described in Section 4.9.1.1, *Regulatory Background*. Hazardous materials to be transported must remain in compliance with US Department of Transportation regulations.

Potential future development in Moorpark would be subject to regulatory programs such as those overseen by the Regional Water Quality Control Board and DTSC. Nonresidential development that would require the use of hazardous materials regulated by federal, state, regional, and local agencies would issue permits for the use of the hazardous materials, which would be monitored and routinely updated by the responsible agency depending on the type of material. These agencies also require applicants for development of potentially contaminated properties to perform investigation and cleanup if the site is found to be contaminated with hazardous substances. In addition, VCRMA has responsibility in Moorpark for the implementation and enforcement of hazardous material regulations as a CUPA. The VCRMA also enforces additional hazardous materials storage requirements in accordance with the Ventura County Hazardous Substances Ordinance and Ventura County Fire Code. Potential future development that would introduce hazardous materials to a site or generate hazardous waste would be regulated pursuant to federal, state, regional, and local laws. Compliance with these regulations would minimize the potential for a significant adverse effect on the environment due to the routine use, transport, and disposal of hazardous materials.

In addition, the Moorpark General Plan 2050 Land Use Element and Safety Element contain policies that require local planning and development decisions to require best practices for the handling of hazardous materials as part of development:

Land Use Element

- **Policy LU-3.6 Industries and jobs.** Prioritize the development of industries that have limited emissions, meet local, regional, and state air and water pollution control goals and standards, and are designed to be compatible with surrounding land uses.
- **Policy LU-4.8 Enhanced industrial districts.** Support new industrial development adjacent to and as infill within existing industrial uses and along major transportation corridors.
- **Policy LU-6.1 Land use compatibility.** Require that development is located and designed to assure compatibility among land uses.
- **Policy LU-6.7 Protection from environmental hazards.** Prohibit or effectively control land uses that pose potential environmental hazards to Moorpark's neighborhoods and districts.
- **Policy LU-7.3 Protect uses from hazards.** Require that new development be located and designed to avoid or mitigate any potentially hazardous conditions.

- **Policy LU-14.1 Commercial Compatibility with adjoining uses.** Require that new commercial uses are compatible in scale and character with adjacent commercial uses and residential neighborhoods.

Circulation Element

- **Policy CI-1.9 Truck safety.** Engage with the California Highway Patrol to ensure that large commercial trucks and trailers meet all California and federal safety standards and move safely throughout the Moorpark community.

Safety Element

- **Policy SE-1.1 Multi-jurisdictional cooperation.** Continue the development of local preparedness plans and multi-jurisdictional cooperation and communication for emergency situations.
- **Policy SE-1.2 Emergency preparedness education.** Educate residents and businesses regarding appropriate actions to safeguard life and property during and immediately after emergencies.
- **Policy SE-1.3 Emergency coordination.** Coordinate with Ventura County, neighboring cities, and non-governmental partners to effectively prepare for and respond to hazards and natural disasters.
- **Policy SE-1.4 Emergency alerts**. Work with the Ventura County Office of Emergency Services to provide alerts about potential, developing, and ongoing emergency situations through extensive early-warning and notification systems that convey information to all residents, in multiple languages and formats, to ensure it is widely accessible, including persons with access and functional needs.
- **Policy SE-1.5 Hazard Mitigation Plan.** Incorporate the most recent version of the Ventura County Hazard Mitigation Plan, Moorpark Annex, most recently certified by FEMA in 2022, into this Safety Element by reference, as permitted by California Government Code Section 65302.6.
- **Policy SE-1.6 Community Emergency Response Team.** Expand the capabilities of the Community Emergency Response Team to provide more community members the tools to respond to disasters.
- **Policy SE-1.7 Redundant communication.** Create redundancies in the communication infrastructure to ensure communication services are available during emergencies.
- **Policy SE-1.9 Multi-Hazard Evacuation Plan.** Identify evacuation routes and develop a multi-hazard evacuation plan, in coordination with surrounding jurisdictions, to ensure evacuation routes remain open and functional during emergencies. Participate in the Ventura County Multi- Jurisdictional Hazard Mitigation Plan.
- **Policy SE-1.10 Ingress and egress.** Require new development to have two ingress and egress routes that account for existing and proposed traffic evacuation volumes at buildout.

- **Policy SE-7.1 Hazardous materials education.** Work with the Ventura County Public Works Agency to continue educating the community regarding the proper storage, handling, use, and disposal of hazardous household materials.
- **Policy SE-7.2 Hazardous materials business plans.** Require business owners to incorporate into their business plans submitted to the Ventura County Fire Department those measures necessary to minimize hazardous materials accidents due to intense ground shaking potential and flooding. Ensure that the plans are updated as necessary.
- **Policy SE-7.3 Hazardous waste.** Coordinate with the Ventura County Public Works Agency to manage hazardous waste, including household hazardous waste.
- **Policy SE-7.4 Hazardous materials spills.** Coordinate with state and regional agencies to respond to hazardous materials spills.
- **Policy SE-7.5 Prohibiting hazardous materials facilities.** Prohibit new hazardous materials facilities adjacent to schools or residential areas.
- **Policy SE-7.6 Enforcing regulations.** Enforce regulations for the safe operations of sites that use toxic and hazardous materials, including hardening hazardous waste storage facilities against natural hazards.

These policies, once adopted, would further minimize exposure to hazardous materials from routine transport, use, or disposal in Moorpark and ensure that new development would not create a significant hazard to the public or environment through routine transport, use, or handling of hazardous materials. As part of the City's project approval process, potential future development and redevelopment would also be required to comply with existing federal, state, regional, and local regulations to minimize impacts related to hazardous materials. Compliance with these regulations would minimize the risk of an adverse effect on the environment through the routine use, transport, and disposal of hazardous materials, and therefore impacts would be less than significant.

Level of Significance Before Mitigation: Less than significant.

Impact 5.9-2: Parcels in Moorpark are listed on hazardous materials sites pursuant to Government Code Section 65962.5. [Threshold H-4]

As discussed in Section 5.9.1.2, *Existing Conditions*, under "Hazardous Materials Sites," a total of 86 hazardous materials sites are listed on databases compiled pursuant to Government Code Section 65962.5, and 7 of those sites are considered active sites. The remaining 79 sites are listed as "completed – case closed," indicating that they have been investigated and/or remediated to the satisfaction of the lead responsible agency (i.e., RWQCB, DTSC, VCRMA) based on land use at the time of closure or, in the case of the waste discharge requirement facilities (see Table 5.9-1), the remaining sites were considered "historical," "never active," or "draft," indicating that the permits are either closed or not utilized to date.

Existing Hazardous Materials Sites

One open hazardous materials site listed in Table 5.9-1 is a cleanup site case that is currently eligible for closure. No open LUST cases are in the plan area. Any development, redevelopment, or reuse on or adjacent to any of the hazardous materials sites should require an environmental site assessment by a qualified environmental professional to ensure that the relevant projects would not disturb hazardous materials on any of the hazardous materials sites or plumes of hazardous materials diffusing from one of the hazardous materials sites. Proposed development, redevelopment, or reuse of the hazardous materials sites could potentially create a substantial hazard to the public or the environment.

Existing Asbestos-Containing Materials and Lead-Based Paint

Many buildings in Moorpark predate 1978 and thus may contain ACM and LBP. Demolition and removal of existing buildings could pose hazards to people and the environment through disturbance and/or release of ACM and LBP.

As stated in Section 5.9.1.1., *Regulatory Background,* several regulations and guidelines pertain to abatement of and protection from exposure to ACM and LBP, including Construction Safety Orders 1529 and Section 1532.1 from Title 8 of the California Code of Regulations, and Part 61, Subpart M, of the Code of Federal Regulations. In California, ACM and LBP abatement must be performed and monitored by contractors with appropriate certification from the California Department of Health Services. Asbestos is also regulated as a hazardous air pollutant under the Clean Air Act and a potential worker safety hazard under the authority of Cal/OSHA.

Requirements for limiting asbestos emissions from building demolition and renovation are specified in the Ventura County Air Pollution Control District's Rule 62.7 (Asbestos: Demolition and Renovation). California Government Code Sections 1529 and 1532.1 provide for exposure limits, exposure monitoring, respiratory protection, and good working practice by workers exposed to lead and ACMs. Strict adherence to these requirements would be required throughout the duration of project construction

Routine Use, Storage, Transport, and Disposal of Hazardous Materials

Construction

Construction in accordance with the Moorpark General Plan 2050 would involve demolition, grading, and construction of new buildings. Potentially hazardous materials used during construction include substances such as paints, sealants, solvents, adhesives, cleaners, and diesel fuel. There is potential for these materials to spill or to create hazardous conditions. However, the materials used will not be in such quantities or stored in such a manner as to pose a significant safety hazard. These activities will also be short term or one time in nature. Project construction workers will be trained in safe handling and hazardous materials use.

To prevent hazardous conditions, existing local, state, and federal laws—such as those listed under Section 5.9.1.1, *Regulatory Background*—will be enforced at the construction sites. For example, compliance with existing regulations would ensure that construction workers and the general public are not exposed to any risks related to hazardous materials during demolition and construction. Cal/OSHA has regulations

concerning the use of hazardous materials, including requirements for safety training, exposure warnings, availability of safety equipment, and preparation of emergency action/prevention plans. For example, all spills or leakage of petroleum products during construction activities must be immediately contained, the hazardous material identified, and the material remediated in compliance with state and local regulations for that contaminant. Contaminated waste must be collected and disposed of at an appropriately licensed disposal or treatment facility.

Furthermore, strict adherence to the emergency response plan requirements set by the Ventura County Fire Department would be required throughout the duration of project construction.

Operation

Operation of projects developed pursuant to the Moorpark General Plan 2050 would involve hazardous materials used in industrial and commercial land uses as well as hazardous materials used for cleaning and maintenance purposes in almost all developed land uses: cleaners, solvents, paints, pesticides, and fertilizers. The amounts of hazardous materials used would vary by land use type: amounts would be small for residential, school, institutional, and many office uses. Amounts would be larger for industrial uses; businesses selling hazardous materials, such as gasoline stations; and service businesses using hazardous materials in their operations, such as construction contractors, painters, cleaners, and printers.

Moorpark has 34 small quantity generators of hazardous wastes in the plan area, 4 very small generators of hazardous wastes, and 10 large quantity generators of hazardous wastes (see Table 5.9-3, above).

The Moorpark General Plan 2050 would designate 6,135,651 square feet for industrial uses, a net increase of 1,858,356 square feet over existing industrial uses (4,277,295 square feet). The Moorpark General Plan 2050 would designate a net decrease of 452,608 square feet of commercial and office uses compared to existing conditions and would designate 676,063 square feet for mixed uses, including commercial uses. Thus, the Moorpark General Plan 2050 buildout is expected to result in some increase in the number of hazardous waste generators. Hazardous wastes would be stored, transported, and disposed of in conformance with existing regulations of the EPA, US Department of Transportation, CalRecycle, and other agencies. Compliance with these regulations would reduce impacts to less-than-significant levels.

Accidental Release of Hazardous Materials

Release of Hazardous Material During Operation

Construction and operation of projects approved under the Moorpark General Plan 2050 would involve some risk of accidental release of hazardous materials used by the projects, as well as accidental disturbance of existing hazardous materials in the environment, such as petroleum products released from leaking USTs, or ACM or LBP in existing buildings that would be renovated or demolished. Use, storage, transport, and disposal of hazardous materials in conformance with regulations would reduce both the likelihood of an accidental release and the potential consequences in the event of an accidental release. Impacts would be less than significant.

Use of hazardous materials on newly developed properties after construction could potentially include cleaning solvents, fertilizers, pesticides, and other materials used in the regular maintenance and operation of future development. As described in Impact 5.9-1, potential future development that would occur under implementation of the Moorpark General Plan 2050 would be required to comply with all federal, State, regional, and local regulations regarding the safe handling, transport, disposal, and use of hazardous materials. Further, the Moorpark General Plan 2050 includes specific goals and policies that would require land planning and development decisions to reduce the impacts that potential future development with known hazardous materials, or the use of such materials, could have on the environment and the public.

Moorpark General Plan 2050 Safety Policy SE-7.2, listed in Impact 5.9-1, would require the preparation hazardous materials business plans for businesses that use hazardous materials. The completion of these business plans would result in ongoing regulatory oversight of businesses that handle hazardous materials. Compliance with applicable federal, State, and local laws and regulations regarding hazardous materials and with the Moorpark General Plan 2050 policies listed under Impact 5.9-1 would reduce the potential for hazardous materials to impact operations, but not to a less-than-significant level. The release of volatile hazardous materials over an extended period of operations into underlying soil and/or groundwater could result in potentially significant vapor intrusion hazards.

Release of Soil-Based Hazardous Materials During Construction

The Moorpark General Plan 2050 would facilitate new development and redevelopment of residential, mixed-use, commercial, parks, and recreational open spaces in the city. Some of the potential future development could occur on properties that are in the databases listed in Tables 5.9-1, 5.9-2, and 5.9-3. As discussed in Impact 5.9-1, construction on a site listed in the database could result in the release of potentially hazardous soil-based materials into the environment during site grading and excavation operations. Further, demolition of existing structures could potentially result in the release of hazardous building materials (e.g., asbestos, lead-based paint) into the environment.

However, because hazardous materials sites exist in Moorpark, as indicated in Tables 5.9-1, 5.9-2, and 5.9-3, it is possible that future development on a designated hazardous materials site could result in the direct contact, inhalation, or ingestion of hazardous materials that could potentially cause adverse health impacts to construction workers, future site inhabitants, and nearby sensitive receptors.

Though compliance with applicable federal, State, and local laws and regulations regarding cleanup and reuse of a listed hazardous materials site (described in Section 4.9.1.1, *Regulatory Background*) and the Moorpark General Plan 2050 policies listed under Impact 5.9-1 would reduce the potential for hazardous materials impacting potential future development under the Moorpark General Plan 2050, it would not reduce them to a less-than-significant level.

Level of Significance Before Mitigation: Potentially significant.

Impact 5.9-3: The project site is not located in the vicinity of an airport or within the jurisdiction of an airport land use plan. [Threshold H-5]

As discussed in Section 5.9.1.2, *Existing Conditions*, under "Airport Hazards," Moorpark is not in an Airport Influence Area that limits land use and building height to prevent hazards to users of the site and to air navigation. Development would not interfere with any airport land use plan or otherwise create an airport-related safety hazard to people residing or working in Moorpark; therefore no impact would occur.

Level of Significance Before Mitigation: No impact.

Impact 5.9-4: Project implementation would not impair the implementation of or physically interfere with and adopted emergency response plan or emergency evacuation plan. [Threshold H-6]

As discussed in Section 4.9.1.1, *Regulatory Background*, the Ventura County Sheriff's Department Office of Emergency Services is responsible for coordinating agency response to disasters or other large-scale emergencies in the city of Moorpark with assistance from the Ventura County Fire Department. The Moorpark EOP establishes policy direction for emergency planning, mitigation, response, and recovery activities in the city. The Moorpark EOP addresses interagency coordination, procedures to maintain communications with county and State emergency response teams, and methods to assess the extent of damage and management of volunteers.

Compliance with applicable federal, State, and local laws and regulations regarding emergency response or emergency evacuation, as described in Section 4.9.1.1, *Regulatory Background*, would ensure that potential future development under the Moorpark General Plan 2050 would not interfere with an adopted emergency response plan or emergency evacuation plan. In addition, the proposed Safety Element contains policies that require local planning and development decisions to require appropriate firefighting infrastructure as part of development, including access for emergency vehicles and minimum water pressure for sustained fire suppression.

The proposed Safety Element also contains policies to improve response times and increase the resiliency of critical-use structures within Moorpark.

- **Policy SE-1.1 Multi-jurisdictional cooperation.** Continue the development of local preparedness plans and multi-jurisdictional cooperation and communication for emergency situations.
- **Policy SE-1.2 Emergency preparedness education.** Educate residents and businesses regarding appropriate actions to safeguard life and property during and immediately after emergencies.
- **Policy SE-1.3 Emergency coordination.** Coordinate with Ventura County, neighboring cities, and non-governmental partners to effectively prepare for and respond to hazards and natural disasters.
- **Policy SE-1.4 Emergency alerts.** Work with the Ventura County Office of Emergency Services to provide alerts about potential, developing, and ongoing emergency situations through extensive early-

warning and notification systems that convey information to all residents, in multiple languages and formats, to ensure it is widely accessible, including persons with access and functional needs.

- **Policy SE-1.5 Hazard Mitigation Plan.** Incorporate the most recent version of the Ventura County Hazard Mitigation Plan, Moorpark Annex, most recently certified by FEMA in 2022, into this Safety Element by reference, as permitted by California Government Code Section 65302.6.
- **Policy SE-1.6 Community Emergency Response Team.** Expand the capabilities of the Community Emergency Response Team to provide more community members the tools to respond to disasters.
- **Policy SE-1.7 Redundant communication.** Create redundancies in the communication infrastructure to ensure communication services are available during emergencies.
- **Policy SE-1.8 Renewable back-up energy.** Provide renewable back-up power supplies, such as solar, wind, and battery power, for critical facilities, including cooling centers and resilience hubs.
- **Policy SE-1.9 Multi-Hazard Evacuation Plan.** Identify evacuation routes and develop a multi-hazard evacuation plan, in coordination with surrounding jurisdictions, to ensure evacuation routes remain open and functional during emergencies. Participate in the Ventura County Multi-Jurisdictional Hazard Mitigation Plan.
- **Policy SE-1.10 Ingress and egress.** Require new development to have two ingress and egress routes that account for existing and proposed traffic evacuation volumes at buildout.
- **Policy SE-1.11 Secondary ingress and egress.** Explore secondary means of ingress and egress in areas with evacuation constraints, as shown in Figure 11b, for new subdivisions or developments of 10 units or more.
- **Policy SE-1.12 Evacuation assistance program.** Develop an evacuation assistance program, in coordination with Moorpark City bus, paratransit, and dial-a-ride agencies to help those with limited mobility or lack of access to a vehicle evacuate safely.
- **Policy SE-1.13 Resilience hubs.** Establish a network of equitably located resilience hubs throughout Moorpark and ensure that resilience hubs are situated outside of areas at risk from hazard impacts to the extent possible, offer refuge from extreme heat and poor air quality due to regional wildfire smoke, and are equipped with renewable energy generation and backup power supplies. Such facilities should be in easily accessible locations and be available to all community members.
- **Policy SE-1.14 Resilient critical and lifeline facility siting.** Locate new critical and lifeline facilities outside of flood and dam inundation zones, very high fire hazard severity zones, and landslide susceptibility areas, when feasible. If not feasible, appropriately site, design, and construct new critical facilities to be resilient to flooding, fires, and landslides.

- **Policy SE-1.15 Hazard mapping.** Update hazard mapping with each update to the Safety Element, or earlier if new information becomes available, to ensure the City relies on best available hazard mapping to inform decisions.
- **Policy SE-1.16 Agency coordination.** Coordinate with Ventura County Fire Department, Ventura County Sheriff's Office, and Ventura County Office of Emergency Services to ensure effective preparation, response, and recovery services are available throughout the community before, during, and after a seismic event.
- **Policy SE-1.17 Accessible hazard preparedness education and outreach.** Promote hazard preparedness with education and outreach available in multiple languages and formats appropriate for people with access and functional needs.
- **Policy SE-1.18 Ready Ventura County Program.** Coordinate with the Ventura County Sheriff's Office of Emergency Services to update and coordinate the Ready Ventura County Program as relevant to the City of Moorpark.
- **Policy SE-1.19 Livestock and large animal evacuation.** Work with Ventura County Animal Services and Ventura County Office of Emergency Services to ensure that owners of livestock and large animal are prepared for and have the ability to evacuate during an emergency.

Compliance with applicable federal, State, and local laws and regulations regarding emergency response or emergency evacuation and with the Moorpark General Plan 2050 policies listed above would ensure future development under the Moorpark General Plan 2050 would not interfere with an adopted emergency response plan or emergency evacuation plan, and impacts would be less than significant.

Level of Significance Before Mitigation: Less than significant.

Impact 5.9-5: Portions of the City of Moorpark are within the Very High Fire Hazards Severity Zone and/or wildland-urban interface and could expose structures and/or residences to fire danger. [Threshold H-7]

See also Impact 5.20-2, in Section 5.20, *Wildfire*. As identified in Figure 5.20-1, *Fire Hazard Severity Zones,* and Figure 5.20-2, *Wildland Urban Interface*, Very High Fire Hazard Severity Zones and wildland-urban interface are located throughout the City, including north of Poindexter Avenue and Princeton Avenue, east of and surrounding State Route (SR) 23, and south and west of Tierra Rejada Road. Future potential development under the Moorpark General Plan 2050 in the Highlands, Championship, Gabbert, and Hitch Ranch areas could exacerbate wildfire risks by adding people to wildfire-prone areas, exposing people and structures to fire dangers. A wildfire combined with Santa Ana winds could expose residents in the city to the uncontrolled spread of wildfire.

Section 5.20.1.1, *Regulatory Framework*, describes plans, policies, regulations, and procedures that help to reduce wildfire risks, which include the 2018 Strategic Fire Plan for California, 2021 California Wildfire and Forest

Resilience Action Plan, Ventura County MHMP Moorpark Annex, Ventura County Community Wildfire Protection Plan, and Moorpark EOP.

All potential future development in Moorpark would be required to comply with the California Building Standards Code; "very high" fire hazard severity zone Fire Safe Regulations; and Moorpark Municipal Code Hillside Management and grading requirements, which include standards to minimize the ignition and spread of wildfire due to slopes. As described in Section 5.20.1.1, *Regulatory Framework*, the Ventura County MHMP and Community Wildfire Protection Plan contain several vegetation management, fuel reduction, and fuel break projects to reduce the uncontrolled spread of wildfire due to vegetation. All potential future development in wildfire-prone areas would also be required to comply with Public Resources Code Section 4291, the California Fire Code, and the Moorpark Municipal Code. These regulations have specific requirements for new and existing development to create defensible space and extensive fuel reduction within 100 feet of a structure, an ember-resistant zone within 5 feet of a structure, and the overall maintenance of properties to reduce the risk of uncontrolled fires or the spread of fires to other properties.

Furthermore, the Moorpark General Plan 2050 contains policies for existing and new projects that integrate with the MHMP, Ventura County Fire Department Strategic Fire Plan, and other State and regional regulations to reduce wildfire risks associated with vegetation.

- **Policy SE-4.1 Fire hazard reduction.** Continue to work with the Ventura County Fire Department and the Ventura Regional Fire Safe Council to implement fire hazard reduction policies and projects, to the extent they are relevant to Moorpark, in the Ventura County Multi-Jurisdictional Hazard Mitigation Plan, the Community Wildfire Protection Plan, the General Plan, and the Capital Improvement Program.

- **Policy SE-4.2 California Building Standards Code and Fire Code.** Continue to adopt and enforce the most recent version of the California Building Standards Code and Fire Code, as well as California Fire Safe Standards for new and existing development.

- **Policy SE-4.3 Sufficient water supplies for fire-fighting.** Ensure that existing and future development in the city has sufficient water supplies nearby for fire-fighting purposes.

- **Policy SE-4.4 Fire safety plans.** New development within Very High Fire Hazard Severity Zones or the Wildland Urban Interface must prepare a fire safety plan for review and approval by the Ventura County Fire Department prior to issuance of building permit.

- **Policy SE-4.5 Ventura County Strategic Fire Plan.** The current version of the Ventura County Fire Department Strategic Fire Plan is hereby incorporated into this Safety Element, by reference, to ensure existing non-conforming development reduces fire hazards by implementing fire safe standards for roads and vegetation.

- **Policy SE-4.6 Vegetation management funding.** Coordinate with the Ventura County Fire Department and Ventura Regional Fire Safe Council to obtain funding for and conduct vegetation and fuel modification or management.

Adherence to the above building practices, fire safety regulations, and vegetation fuel management requirements would reduce the potential for exacerbating wildfire risks. However, due to the programmatic nature of this analysis, the unknown details and potential impacts of specific future potential development projects under the Moorpark General Plan 2050, and the possibility of potential future development being in wildfire prone areas, impacts would still be potentially significant.

Level of Significance Before Mitigation: Potentially significant.

5.9.4 Relevant General Plan Policies

The following are relevant policies of the Moorpark General Plan 2050, which contribute to reducing potential hazards as a result of implementation of the proposed project.

Land Use Element

- **Policy LU-4.9 Development fit with natural terrain.** Decrease the overall density and intensity of development as the slope of the natural terrain increases.
- **Policy LU-7.2 Design development to respect natural setting.** Require that new development respect, integrate with, and complement the natural features of the land including conforming building massing to topographic forms, restricting grading of steep slopes and encouraging the preservation of ridgelines and significant hillsides as prominent visual features.
- **Policy LU-7.3 Protect uses from hazards.** Require that new development be located and designed to avoid or mitigate any potentially hazardous conditions.
- **Policy LU-8.9 Design to avoid hazards.** Require that development in significant hazard areas is located and designed to ensure safety in accordance with the Safety Element.
- **Policy LU-17.6 Utility undergrounding.** Encourage the undergrounding of utilities in conjunction with development projects where feasible.

Circulation Element

- **Policy CI-3.4 Hillside areas.** Require that new collector streets in hillside areas incorporate curbs, gutters, and graded shoulders, and prohibit on-street parking except where pull-outs may be incorporated that do not affect safe access to residents and for fire equipment.
- **Policy CI-3.5 Private streets.** Require that private streets be improved to public street standards prior to dedication to the City.
- **Policy CI-3.7 Evacuation routes.** Designate and sign evacuation routes in consideration of the findings of the Risk Vulnerability Assessment.

- **Policy CI-13.3 Utility Undergrounding.** Continue to pursue undergrounding of overhead utility lines, and support maintenance and replacement programs to reduce wildfire hazards.

Open Space, Parks, and Recreation Element

- **Policy OSPR-4.5 Underground utilities.** Coordinate with SCE and local utilities to underground existing above-ground utility lines where feasible.

- **Policy OSPR-6.1 Limitations on development.** Maintain open space lands for health and safety by limiting development in areas susceptible to flood, seismic risk, geologic instability, and wildfire, as detailed in the Safety Element.

Safety Element

- **Policy SE-1.1 Multi-jurisdictional cooperation.** Continue the development of local preparedness plans and multi-jurisdictional cooperation and communication for emergency situations.

- **Policy SE-1.2 Emergency preparedness education.** Educate residents and businesses regarding appropriate actions to safeguard life and property during and immediately after emergencies.

- **Policy SE-1.3 Emergency coordination.** Coordinate with Ventura County, neighboring cities, and non-governmental partners to effectively prepare for and respond to hazards and natural disasters.

- **Policy SE-1.4 Emergency alerts.** Work with the Ventura County Office of Emergency Services to provide alerts about potential, developing, and ongoing emergency situations through extensive early-warning and notification systems that convey information to all residents, in multiple languages and formats, to ensure it is widely accessible, including persons with access and functional needs.

- **Policy SE-1.5 Hazard Mitigation Plan.** Incorporate the most recent version of the Ventura County Hazard Mitigation Plan, Moorpark Annex, most recently certified by FEMA in 2022, into this Safety Element by reference, as permitted by California Government Code Section 65302.6.

- **Policy SE-1.6 Community Emergency Response Team.** Expand the capabilities of the Community Emergency Response Team to provide more community members the tools to respond to disasters.

- **Policy SE-1.7 Redundant communication.** Create redundancies in the communication infrastructure to ensure communication services are available during emergencies.

- **Policy SE-1.8 Renewable back-up energy.** Provide renewable back-up power supplies, such as solar, wind, and battery power, for critical facilities, including cooling centers and resilience hubs.

- **Policy SE-1.9 Multi-Hazard Evacuation Plan.** Identify evacuation routes and develop a multi-hazard evacuation plan, in coordination with surrounding jurisdictions, to ensure evacuation routes remain open and functional during emergencies. Participate in the Ventura County Multi-Jurisdictional Hazard Mitigation Plan.

- **Policy SE-1.10 Ingress and egress.** Require new development to have two ingress and egress routes that account for existing and proposed traffic evacuation volumes at buildout.
- **Policy SE-1.11 Secondary ingress and egress.** Explore secondary means of ingress and egress in areas with evacuation constraints, as shown in Figure 11b, for new subdivisions or developments of 10 units or more.
- **Policy SE-1.12 Evacuation assistance program.** Develop an evacuation assistance program, in coordination with Moorpark City bus, paratransit, and dial-a-ride agencies to help those with limited mobility or lack of access to a vehicle evacuate safely.
- **Policy SE-1.13 Resilience hubs.** Establish a network of equitably located resilience hubs throughout Moorpark and ensure that resilience hubs are situated outside of areas at risk from hazard impacts to the extent possible, offer refuge from extreme heat and poor air quality due to regional wildfire smoke, and are equipped with renewable energy generation and backup power supplies. Such facilities should be in easily accessible locations and be available to all community members.
- **Policy SE-1.14 Resilient critical and lifeline facility siting.** Locate new critical and lifeline facilities outside of flood and dam inundation zones, very high fire hazard severity zones, and landslide susceptibility areas, when feasible. If not feasible, appropriately site, design, and construct new critical facilities to be resilient to flooding, fires, and landslides.
- **Policy SE-1.15 Hazard mapping.** Update hazard mapping with each update to the Safety Element, or earlier if new information becomes available, to ensure the City relies on best available hazard mapping to inform decisions.
- **Policy SE-1.16 Agency coordination.** Coordinate with Ventura County Fire Department, Ventura County Sheriff's Office, and Ventura County Office of Emergency Services to ensure effective preparation, response, and recovery services are available throughout the community before, during, and after a seismic event.
- **Policy SE-1.17 Accessible hazard preparedness education and outreach.** Promote hazard preparedness with education and outreach available in multiple languages and formats appropriate for people with access and functional needs.
- **Policy SE-1.18 Ready Ventura County Program.** Coordinate with the Ventura County Sheriff's Office of Emergency Services to update and coordinate the Ready Ventura County Program as relevant to the City of Moorpark.
- **Policy SE-1.19 Livestock and large animal evacuation.** Work with Ventura County Animal Services and Ventura County Office of Emergency Services to ensure that owners of livestock and large animal are prepared for and have the ability to evacuate during an emergency.

- **Policy SE-2.1 California Building Standards Code.** Continue to implement California Building Standards Code seismic safety standards for construction of new buildings.
- **Policy SE-2.2 Geologic studies.** Require the preparation of detailed geologic studies for new development within seismic and geologic hazard zones.
- **Policy SE-2.5 New development.** Require new development to comply with current state, regional, and local requirements for seismic and geologic safety.
- **Policy SE-2.6 Slope stability analysis.** Require that slope stability analyses be conducted for new development in hillside areas and compliance with Section 17.38, Hillside Management, of the Moorpark Municipal Code.
- **Policy SE-3.2 Low impact development.** Minimize impervious areas by requiring development to include low impact development and green infrastructure that increase pervious surfaces to absorb impacts from stormwater and flooding.
- **Policy SE-3.3 Floodway management.** Consider floodway management design that includes areas where stream courses are left natural or as developed open space.
- **Policy SE-3.4 Flood control infrastructure.** Coordinate with the Ventura County Public Works Agency to improve and maintain flood control structures, detention basins, channel reconstruction, and diversion systems within Moorpark and the greater Calleguas Creek watershed, using natural infrastructure where feasible.
- **Policy SE-3.5 Critical and lifeline facilities.** Maintain the structural and operational integrity of critical and lifeline facilities during and after flooding events.
- **Policy SE-3.6 Floodplain management requirements.** Require new development in the 100-year and/or 500-year flood hazard zones to comply with provision Moorpark Municipal Code Section 15.24, Floodplain Management.
- **Policy SE-3.7 Review of new flood control facilities.** Coordinate with the Ventura County Public Works Agency to review new development for flood control and flood hazard reduction from new development.
- **Policy SE-3.8 Flood safety plans.** Require new development within a designated floodplain to submit, flood safety plan for approval by the Floodplain Administrator.
- **Policy SE-3.9 Green infrastructure.** Promote the use of green infrastructure to convey stormwater and reduce flooding.
- **Policy SE-4.1 Fire hazard reduction.** Continue to work with the Ventura County Fire Department and the Ventura Regional Fire Safe Council to implement fire hazard reduction policies and projects, to the

extent they are relevant to Moorpark, in the Ventura County Multi-Jurisdictional Hazard Mitigation Plan, the Community Wildfire Protection Plan, the General Plan, and the Capital Improvement Program.

- **Policy SE-4.2 California Building Standards Code and Fire Code.** Continue to adopt and enforce the most recent version of the California Building Standards Code and Fire Code, as well as California Fire Safe Standards for new and existing development.
- **Policy SE-4.3 Sufficient water supplies for fire-fighting.** Ensure that existing and future development in the city has sufficient water supplies nearby for fire-fighting purposes.
- **Policy SE-4.4 Fire safety plans.** New development within Very High Fire Hazard Severity Zones or the Wildland Urban Interface must prepare a fire safety plan for review and approval by the Ventura County Fire Department prior to issuance of building permit.
- **Policy SE-4.5 Ventura County Strategic Fire Plan.** The current version of the Ventura County Fire Department Strategic Fire Plan is hereby incorporated into this Safety Element, by reference, to ensure existing non-conforming development reduces fire hazards by implementing fire safe standards for roads and vegetation.
- **Policy SE-4.6 Vegetation management funding.** Coordinate with the Ventura County Fire Department and Ventura Regional Fire Safe Council to obtain funding for and conduct vegetation and fuel modification or management.
- **Policy SE-4.7 Egress and ingress.** Require new development within a Very High Fire Hazard Severity Zone to have at least two egress and ingress options, visible street signs that identify evacuation routes, and adequate water supply for structural suppression.
- **Policy SE-5.4 Undergrounding electric utilities.** Continue to collaborate with Southern California Edison to underground electrical transmission infrastructure throughout the City, prioritizing high voltage transmission lines and areas within Very High Fire Hazard Severity Zones.
- **Policy SE-9.1 Fire safety services.** Work with the Ventura County Fire Department to provide fire prevention, protection, and emergency preparedness services that adequately protect residents, employees, visitors, and structures from fire and fire-related emergencies.
- **Policy SE-9.2 Staffing and equipment.** Coordinate with Ventura County Fire Department to ensure adequate staffing and equipment for fire protection services throughout the City to quickly respond to emergencies.
- **Policy SE-9.3 Fair share extension.** Require new development to fund a fair share extension of fire services to maintain service standards, including personnel and capital improvements costs.

5.9.5 Level of Significance Before Mitigation

Upon implementation of regulatory requirements and standard conditions of approval, some impacts would be less than significant: 5.9-1, 5.9-3, and 5.9-4.

Without mitigation, these impacts would be potentially significant:

- **Impact 5.9-2** Parcels in Moorpark are listed on hazardous materials sites pursuant to Government Code Section 65962.5.
- **Impact 5.9-5** Portions of the City of Moorpark are in the "very high" fire hazards severity zone and/or wildland-urban interface and could expose structures and/or residences to fire danger.

5.9.6 Mitigation Measures

Impact 5.9-2

HAZ-1 **Phase I Environmental Site Assessment.** Prior to discretionary approval by the City of Moorpark for development of projects subject to review under the California Environmental Quality Act (CEQA) (i.e., nonexempt projects), project applicants shall prepare and submit a Phase I Environmental Site Assessment (ESA) evaluating potential project impacts associated with recognized environmental conditions to the City of Moorpark Community Development Department for review and approval prior to initiation of construction activities. The evaluation shall be prepared in conformance with American Society of Testing and Materials (ASTM) methodology for assessing impacts. If there are recognized environmental conditions, the City of Moorpark shall require feasible mitigation measures to remediate the site. Potential measures shall be incorporated as conditions of approval for a project and may include:

- Preparation of and mandatory adherence to a Soils Management Plan (SMP). The SMP would summarize soil and groundwater analytical data collected on the project site during past investigations; identify management options for excavated soil and/or groundwater if contaminated media are encountered during deep excavations; and identify monitoring wells, irrigation wells, or other wells requiring proper abandonment in compliance with local, State, and federal laws, policies, and regulations. The SMP shall include measures for identifying, testing, and managing soil and/or groundwater suspected of or known to contain hazardous materials. The SMP should:
  - Provide procedures for evaluating, handling, storing, testing, and disposing of soil and groundwater during project excavation and dewatering activities, respectively.
  - Describe required worker health and safety provisions for all workers potentially exposed to hazardous materials in accordance with State and federal worker safety regulations.

- Designate personnel responsible for implementation of the SMP.

- Preparation of and mandatory adherence to the recommendations from a Soil Vapor Intrusion Assessment for sites with potential residual contamination in soil or groundwater that are planned for development with an overlying occupied building. A Soil Vapor Intrusion Assessment would indicate the potential for significant vapor intrusion into an occupied building. Project design for all projects with significant vapor intrusion shall include vapor controls or source removal, as appropriate, in accordance with regulatory agency requirements. Soil vapor mitigations or controls could include vapor barriers, passive venting, and/or active venting.

Impact 5.9-5

Policies identified in the Moorpark General Plan 2050 provide the best wildfire hazard reduction measures available. However, the only way to fully avoid the wildfire impact from implementation is to not allow development in "very high" fire hazard severity zones and the wildland-urban interface. The majority of the undeveloped parts of Moorpark are in a "very high" fire hazards severity zone and/or the wildland-urban interface. Prohibiting new development in Moorpark is not feasible or practical because the City has a responsibility to meet other obligations, including increases in the number and types of housing available in the city. The City needs to promote residential development, as required by State housing law, within its adopted growth boundaries. Therefore, this type of measure is considered and rejected. There are no feasible mitigation measures.

5.9.7 Level of Significance After Mitigation

Impact 5.9-2

Implementation of the proposed Moorpark General Plan 2050 could increase population, buildings, and infrastructure in areas with impacted soils and/or groundwater. Mitigation Measure HAZ-1 would ensure that projects on listed sites prepare an Environmental Site Assessment prior to construction activities, which includes measures to reduce impacts related to soil management during construction and vapor intrusion in the operations phase to achieve the standards of the applicable regulatory agency. With the implementation of Mitigation Measure HAZ-1, the level of significance of this impact would be reduced to less than significant.

Impact 5.9-5

Implementation of the proposed Moorpark General Plan 2050 could increase population, buildings, and infrastructure in wildfire-prone areas. Though Moorpark General Plan 2050 policies and mandatory State wildfire hazard reduction measures reduce risks in wildfire-prone areas, impacts related to exacerbating the risk of pollutant concentrations from wildfire and the uncontrolled spread of wildfire would be reduced, but not to a less-than-significant level.

The Moorpark General Plan 2050 contains policies that require existing development, new, and redevelopment projects to create and maintain fire-safe vegetation around structures and roadways, enforce

fire-safe standards, and create fuel breaks. New development would also be required to prepare fire safety plans. These policies provide the best wildfire hazard reduction measures available. However, the only way to fully avoid the wildfire impact is to not allow development in "very high" fire hazard severity zones and the wildland-urban interface. Due to potential unknown impacts from future development under the Moorpark General Plan 2050, impacts at the programmatic level would remain **significant and unavoidable**. This conclusion does not prevent a finding of less-than-significant impacts at the project level.

5.9.8 References

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5.10 HYDROLOGY AND WATER QUALITY

This section of the Draft Environmental Impact Report (DEIR) evaluates the potential impacts of the proposed Moorpark General Plan 2050 (proposed project) to hydrology and water quality conditions in the City of Moorpark. Hydrology deals with the distribution and circulation of water, both on land and underground. Water quality deals with the quality of surface- and groundwater. Surface water includes lakes, rivers, streams, and creeks; groundwater is under the earth's surface. The analysis in this section is based in part on:

- *Moorpark Infrastructure CEQA Technical Report*, Fuscoe, September 30, 2022.

A complete copy of this study is included as Appendix H to the DEIR.

5.10.1 Environmental Setting

5.10.1.1 REGULATORY BACKGROUND

Federal, state, and regional laws, regulations, plans, or guidelines that are potentially applicable to the City are summarized in this section. They are designed to achieve regional water quality objectives and thereby protect the beneficial uses of the region's surface and groundwater. The also address flood hazards.

Federal

Clean Water Act

The United States Environmental Protection Agency (EPA) is the lead federal agency responsible for water quality management. The Clean Water Act (CWA) of 1972 is the primary federal law that governs and authorizes water quality control activities by the EPA and the states (33 US Code Sections 1251 to 1376). Various elements of the CWA, which address water quality, are discussed below.

Permits to dredge or fill waters of the United States are administered by the US Army Corps of Engineers (USACE) under Section 404 of the CWA. "Waters of the United States" are defined as territorial seas and traditional navigable waters, perennial and intermittent tributaries to those waters, lakes and ponds and impoundments of jurisdictional waters, and wetlands adjacent to jurisdictional waters. The regulatory branch of the USACE is responsible for implementing and enforcing Section 404 of the CWA and issuing permits. Any activity that discharges fill material and/or requires excavation in waters of the United States must obtain a Section 404 permit. Before issuing the permit, the USACE requires that an analysis be conducted to demonstrate that the proposed project is the least environmentally damaging practicable alternative. Also, the USACE is required to comply with the National Environmental Policy Act before it can issue an individual Section 404 permit.

Under Section 401 of the CWA, every applicant for a Section 404 permit that may result in a discharge to a water body must first obtain State water quality certification that the proposed activity will comply with State water quality standards. Certifications are issued in conjunction with USACE Section 404 permits for dredge and fill discharges. In addition, an application for individual water quality certification and/or waste discharge

requirements must be submitted for any activity that would result in the placement of dredged or fill material in waters of the State that are not jurisdictional to the USACE, such as isolated wetlands, to ensure that the proposed activity complies with State water quality standards. In California, the authority to either grant water quality certification or waive the requirement is delegated by the State Water Resources Control Board (SWRCB) to the nine Regional Water Quality Control Boards (RWQCB).

Under federal law, the EPA has published water quality regulations under Volume 40 of the Code of Federal Regulations. Section 303 of the CWA requires states to adopt water quality standards for all surface waters of the United States. As defined by the CWA, water quality standards consist of two elements: (1) designated beneficial uses of the water body in question and (2) criteria that protect the designated uses. Section 304(a) requires the EPA to publish advisory water quality criteria that accurately reflect the latest scientific knowledge on the kind and extent of all effects on health and welfare that may be expected from the presence of pollutants in water. Where multiple uses exist, water quality standards must protect the most sensitive use.

When water quality does not meet CWA standards and compromises designated beneficial uses of a receiving water body, Section 303(d) of the CWA requires that the water body be identified and listed as "impaired." Once a water body has been designated as impaired, a total maximum daily load (TMDL) must be developed for the impairing pollutant(s). A TMDL is an estimate of the total load of pollutants from point, nonpoint, and natural sources that a water body may receive without exceeding applicable water quality standards, with a factor of safety included. Once established, the TMDL allocates the loads among current and future pollutant sources to the water body.

Fish and Wildlife Coordination Act

The Fish and Wildlife Coordination Act provides the basic authority for the US Fish and Wildlife Service to evaluate impacts to fish and wildlife from proposed water resource development projects. This act requires that all federal agencies consult with the US Fish and Wildlife Service, the National Marine Fisheries Service, and State wildlife agencies (i.e., the California Department of Fish and Wildlife) for activities that affect, control, or modify waters of any stream or bodies of water. Under this act, the US Fish and Wildlife Service has responsibility for reviewing and commenting on all water resources projects. For example, it would provide consultation to the USACE prior to issuance of a Section 404 permit.

National Pollutant Discharge Elimination System

The National Pollutant Discharge Elimination System (NPDES) permit program was established by the CWA to regulate municipal and industrial discharges to surface waters of the United States, including discharges from municipal separate storm sewer systems (MS4). Federal NPDES permit regulations have been established for broad categories of discharges, including point-source municipal waste discharges and nonpoint-source stormwater runoff. NPDES permits generally identify effluent and receiving water limits on allowable concentrations and/or mass emissions of pollutants in the discharge; prohibitions on discharges not specifically allowed under the permit; and provisions that describe required actions by the discharger, including industrial pretreatment, pollution prevention, self-monitoring, and other activities.

Under the NPDES program, all facilities that discharge pollutants into waters of the United States are required to obtain an NPDES permit. Requirements for stormwater discharges are also regulated under this program. In California, the NPDES permit program is administered by the SWRCB through the nine RWQCBs. The city lies within the jurisdiction of the Los Angeles RWQCB (Region 4).

National Dam Safety Act of the Federal Emergency Management Agency

The National Dam Safety Act of 2006 authorized a program to reduce the risks to life and property from dam failure by establishing a safety and maintenance program. The Federal Emergency Management Agency (FEMA) is the lead federal agency for the National Dam Safety Program and is responsible for coordinating efforts to secure the safety of dams across the country. This national program targets the improvement of dams and the safety of those who live in surrounding communities. Since it was first authorized by Congress in 1996, there have been marked improvements in the safety of many of the nation's dams. The program makes federal funds available to the states, which are primarily responsible for protecting the public from failures of nonfederal dams and pursuing initiatives that enhance the safety of dams posing the greatest risk to people and property.

National Flood Insurance Program

FEMA also administers the National Flood Insurance Program, which provides subsidized flood insurance to communities that comply with FEMA regulations limiting development in flood plains. FEMA issues flood insurance rate maps that provide flood information and identify flood hazard zones in the community. The design standard for flood protection established by FEMA is the 100-year flood event, also described as a flood that has a 1-in-100 chance of occurring in any given year. FEMA mapping of flood hazards that includes the project area was updated in 2008.

State

Porter-Cologne Water Quality Act

The Porter-Cologne Water Quality Act is the basic water quality control law for California (Water Code sections 13000 et seq.). Under this act, the SWRCB has ultimate control over state water rights and water quality policy. In California, the EPA has delegated authority to issue NPDES permits to the SWRCB. The SWRCB, through its nine RWQCBs carries out the regulation, protection, and administration of water quality in each region. Each regional board is required to adopt a water quality control plan or basin plan that designates beneficial uses and water quality objectives for the region's surface water and groundwater basins.

Construction General Permit

Construction activities that disturb one or more acres of land must comply with the requirements of the SWRCB Construction General Permit (CGP)—2009-0009-DWQ, as amended by 2010-0014-DWQ and 2012-0006-DWQ. Under the terms of the permit, applicants must file Permit Registration Documents (PRD) with the SWRCB prior to the start of construction. The PRDs include a notice of intent, risk assessment, site map, Stormwater Pollution Prevention Plan (SWPPP), annual fee, and a signed certification statement. The PRDs are submitted electronically to the SWRCB via the Stormwater Multiple Application and Report

Tracking System website. On July 22, 2022, the SWRCB issued a draft of the revised Statewide CGP that, when approved, will supersede Order 2009-0009-DWQ and its amendments.

Applicants must demonstrate conformance with applicable best management practices (BMP) and prepare a SWPPP containing a site map that shows the construction site perimeter, existing and proposed buildings, lots, roadways, stormwater collection and discharge points, general topography before and after construction, and drainage patterns across the project area. The SWPPP must list BMPs that would be implemented to prevent soil erosion and discharge of construction-related pollutants that could contaminate nearby water resources. Additionally, the SWPPP must contain a visual monitoring program for all risk levels and a stormwater sampling and analysis program for Risk Levels 2 and 3.

General Industrial Permit

The General Industrial Permit is an NPDES General Permit (Order No. CAS000001) issued in compliance with section 402 of the Clean Water Act. The permit took effect on July 1, 2015. The General Industrial Permit regulates operators of facilities that are subject to stormwater permitting and discharge stormwater associated with industrial activity.

Trash Amendments

On April 7, 2015, the SWRCB adopted an amendment to the "Water Quality Control Plan for Ocean Waters of California" to control trash and Part 1, Trash Provisions, of the "Water Quality Control Plan for Inland Surface Waters, Enclosed Bays, and Estuaries of California." They are collectively referred to as "the Trash Amendments." The Trash Amendments apply to all surface waters of California and include a land-use-based compliance approach to focus trash controls on areas with high trash-generation rates. Areas such as high-density residential, industrial, commercial, mixed urban, and public transportation stations are considered priority land uses. There are two compliance tracks:

- **Track 1:** Permittees install, operate, and maintain a network of certified full-capture systems in storm drains that capture runoff from priority land uses.
- **Track 2:** Permittees must implement a plan with a combination of full-capture systems, multibenefit projects, institutional controls, and/or other treatment methods that have the same effectiveness as Track 1 methods.

The Trash Amendments provide a framework for permittees to implement its provisions—full compliance within 10 years of the permit and interim milestones, such as average load reductions of 10 percent per year.

General Waste Discharge Requirements for Discharges to Land with a Low Threat to Water Quality

SWRCB Order No. 2003-0003-DWQ establishes minimum standards for discharges to land with a low threat to water quality (such as small/temporary dewatering projects). The discharger must comply with any, more-stringent standards in the applicable basin plan. Dischargers are also required to file a report of waste discharge.

Senate Bill 92

On June 27, 2017, Governor Brown signed Senate Bill (SB) 92, which set new requirements for dam safety. As part of this legislation, dam owners must now submit inundation maps to the Department of Water Resources. After the maps are approved, the dam owner must submit an emergency action plan to the California Office of Emergency Services (Cal OES). The dam owner must submit updated plans and inundation maps every 10 years, or sooner under certain conditions. Cal OES will review and approve the emergency action plans. This legislation added provisions for the emergency action plans, including compliance requirements, exercises of the plan, and coordination with local public safety agencies.

Emergency Services Act

The Emergency Services Act, California Government Code Section 8589.5(b), calls for public safety agencies whose jurisdiction contains populated areas below dams to adopt emergency procedures for the evacuation and control of these areas in the event of a partial or total failure of the dam. Cal OES is responsible for the coordination of overall State agency response to major disasters and assisting local governments in their emergency preparedness, response, recovery, and hazard mitigation efforts. In addition, the Cal OES Dam Safety Program provides assistance and guidance to local jurisdictions on emergency planning for dam failure events and is also the designated repository of dam failure inundation maps.

Division of Safety of Dams

Since 1929, the State of California has supervised all nonfederal dams in California through the Dam Safety Program under the jurisdiction of the California Division of Safety of Dams (DSOD). The DSOD came into existence as a direct result of the failure of St. Francis Dam in southern California in 1928, which resulted in the death of more than 450 people.

The DSOD engineers and engineering geologists review and approve plans and specifications for the design of dams and oversee their construction to ensure compliance with the approved plans and specifications. Reviews include site geology, seismic setting, site investigations, construction material evaluation, dam stability, hydrology, hydraulics, and structural review of appurtenant structures. In addition, the DSOD engineers inspect over 1,200 dams on a yearly schedule to ensure they are performing and being maintained in a safe manner.

California Water Code Section 13751

In 1949, the California Legislature concluded that collecting information on newly constructed, modified, or destroyed wells would be valuable in the event of underground pollution and would also provide geologic information to better manage California's groundwater resources. Section 13751 of the Water Code requires well completion report forms to be filed with Department of Water Resources within 60 days of the date that construction, alteration, abandonment, or destruction of a well is complete. Completed forms are sent to the department's regional office in the well's area.

Sustainable Groundwater Management Act

The Sustainable Groundwater Management Act (SGMA) of 2014 was a comprehensive, three-bill package that provides a framework for the sustainable management of groundwater supplies by local authorities. SGMA requires the formation of local groundwater sustainability agencies (GSA) to assess local water basin conditions and adopt locally based groundwater sustainability plans (GSP). SGMA gives GSAs 20 years to implement plans, achieve long-term groundwater sustainability, and protect existing surface water and groundwater rights. SGMA also provides local GSAs with the authority to require registration of groundwater wells, measure and manage extractions, require reports and assess fees, and request revisions of basin boundaries, including establishing new subbasins. Furthermore, under SGMA, GSAs responsible for high- and medium-priority basins must adopt GSPs within five to seven years, depending on whether the basin is in critical overdraft.

Moorpark overlies the Las Posas Valley (east and south subbasins), Simi Valley, and Tierra Rejada groundwater basins. The Las Posas basin is a high-priority basin, and the Simi Valley and Tierra Rejada basins are very-low-priority basins. None of the basins are adjudicated[1] and none are in a state of critical overdraft (DWR 2022a).

The Fox Canyon Groundwater Management Agency is the GSA that preserves groundwater resources in portions of the Oxnard Subbasin, the Las Posas Valley Basin (LPVB), the Pleasant Valley Basin, and the Arroyo Santa Rosa Valley Basin. The Camrosa Water District GSA manages the portion of the LPVB within the district's boundaries,[2] and the County of Ventura GSA manages groundwater resources in the outlying areas of the LPVB (DWR 2022b). A December 2019 GSP was tailored to the resources and needs in the LPVB, with the goal to achieve sustainable groundwater management within 20 years.

Regional

Los Angeles Region Basin Plan for the Coastal Watersheds of Los Angeles and Ventura Counties

The Los Angeles RWQCB's Basin Plan is designed to preserve and enhance water quality and protect the beneficial uses of all regional waters. Specifically, the Basin Plan:

- Designates beneficial uses for surface and ground waters.
- Sets narrative and numerical objectives that must be attained or maintained to protect the designated beneficial uses and conform to the state's antidegradation policy.
- Describes implementation programs to protect all waters in the region.

[1] When water users within a groundwater basin are in dispute over legal rights to the water, a court can issue a ruling known as an adjudication. The court decree will define the area of adjudication. The court typically appoints a watermaster to administer the court's decree. In basins or areas where a lawsuit is brought to adjudicate, the groundwater rights of all the overliers and appropriators are determined by the court.

[2] Camrosa Water District encompasses about 31 square miles in the southern part of Ventura County. The district is surrounded by the cities of Camarillo, Simi Valley, Moorpark, and Thousand Oaks.

In addition, the Basin Plan incorporates (by reference) all applicable SWRCB and RWQCB plans and policies and other pertinent water quality policies and regulations.

The Basin Plan is a resource for the RWQCB and others who use water and/or discharge wastewater in Region 4. Other agencies and organizations involved in environmental permitting and resource management activities also use the Basin Plan. Finally, the Basin Plan provides valuable information to the public about local water quality issues.

Los Angeles RWQCB (MS4) Permit for the Coastal Watershed of Los Angeles and Ventura Counties

On July 23, 2021, the Los Angeles RWQCB adopted a Regional Phase I MS4 Permit for discharges within the coastal watersheds of Los Angeles and Ventura counties (Order No. R4-2021-0105, NPDES No. CAS004004).

The Los Angeles County Flood Control District, County of Los Angeles; 85 incorporated cities within the coastal watersheds of Los Angeles County; Ventura County Watershed Protection District; County of Ventura; and 10 incorporated cities in Ventura County, including Moorpark, are subject to waste discharge requirements for MS4 discharges originating from within their jurisdiction.

Groundwater from Construction and Project Dewatering to Surface Waters

On June 6, 2013, the Los Angeles RWQCB adopted Order No. R4-2018-0215—Waste Discharge Requirements for Discharges of Groundwater from Construction and Project Dewatering to Surface Waters in Coastal Watersheds of Los Angeles and Ventura Counties. The order covers discharges to surface waters from dewatering operations and other types of wastewaters, as deemed appropriate, and authorizes discharges of treated or untreated groundwater generated from dewatering operations, or other applicable wastewater discharges not specifically covered, or fill material that have received water quality certification pursuant to Section 401 of the CWA.

To be authorized to discharge, the discharger must submit a notice of intent. If the discharge is eligible, the Los Angeles RQWCB will notify the discharger that the discharge is authorized and prescribes an appropriate monitoring and reporting program. For new discharges, the discharge shall not commence until receipt of the Los Angeles RWQCB's written determination of eligibility or until an individual NPDES permit is issued.

Ventura County Technical Guidance Manual for Stormwater Quality Control Measures

The Technical Guidance Manual for Stormwater Quality Measures (TGM) provides guidance for the implementation of stormwater management control measures in new development and redevelopment projects in Ventura County. The guidelines are intended to improve water quality and mitigate potential water quality impacts and have been developed to meet the requirements of the MS4 permit. The TGM does not expand or circumvent these requirements but provides guidance on how to meet them.

Ventura County Watershed Protection District Design Hydrology Manual

The Ventura County Watershed Protection District's (VCWPD) Design Hydrology Manual presents guidelines and sufficient input data for computing design hydrology, including peak flow rates, in Ventura County. Design procedures are intended for use by all agencies and engineering consultants engaged in the design of flood control works and development projects throughout the county. The manual also includes development mitigation criteria to minimize the impacts of development on the existing drainage system (VCWPD 2017).

Ventura County Hydromodification Control Plan

Land development modifies natural watershed and stream hydrologic (water) and geomorphic (landform) processes by introducing impervious surfaces and drainage infrastructure that in turn changes runoff. Potential changes may include increased runoff volumes, higher peak flows, more frequent runoff events, and longer flow durations. Development may also introduce dry weather flows where only wet weather flows previously existed. These changes to runoff patterns caused by land use modifications are referred to as "hydromodification."

Unless managed, hydromodification can cause channel erosion, channel migration, or sedimentation and can result in biologic impacts to stream systems (referred to as "hydromodification impacts"). Such impacts may be associated with impairment of beneficial uses and degradation of stream conditions (Geosyntec 2013).

The objective of the Hydromodification Control Plan is to minimize hydromodification impacts associated with applicable new development and redevelopment in Ventura County. This objective is achieved through complying, in a cost-effective manner, with the hydromodification control criteria stipulated in the MS4 permit.

Ventura Countywide Stormwater Quality Management Program

The Ventura Countywide Stormwater Quality Management Program includes the Cities of Camarillo, Fillmore, Moorpark, Ojai, Oxnard, Port Hueneme, Simi Valley, Santa Paula, Thousand Oaks, Ventura, the County of Ventura, and the VCWPD. These partners work together to meet the compliance requirements of the MS4 permit. The Ventura Countywide Stormwater Quality Management Program intends to develop a watershed management program to achieve compliance with water quality standards, including achieving TMDLs. Moorpark will be a participating program permittee when the watershed management program is established.

Groundwater Sustainability Plan for the Las Posas Valley Basin

The Fox Canyon Groundwater Management Agency (FCGMA) developed the GSP for the LPVB in compliance with the 2014 SGMA. The GSP is the sole GSP prepared for the LPVB and covers the entire LPVB, including all areas of the LPVB outside of FCGMA's jurisdiction. The purpose of the GSP is to define the conditions under which the groundwater resources of the entire LPVB, which support agricultural, municipal and industrial, and environmental uses, will be managed sustainably in the future (FCGMA 2019).

Local

City of Moorpark Municipal Code

Chapter 8.52, Stormwater Quality Management: Chapter 8.52 includes prohibitions on illicit connections and illicit discharges. The chapter also includes the requirement that all development in the city be undertaken in accordance with the requirements established by an applicable NPDES permit related to the reduction or elimination of pollutants in stormwater. Furthermore, the chapter requires the preparation of a SWPPP in accordance with the State general permit and City requirements. Prior to the issuance by the City of any discretionary land use approval or permit for any development, the property owner shall submit to and obtain the approval of the director for a stormwater pollution control plan.

Chapter 8.40, Water Wells Standards: The purpose of this chapter is to provide for the construction, maintenance, operation, use, repair, modification, and destruction of wells in such a manner that the groundwater of the city will not be contaminated or polluted, and that water obtained from wells will be suitable for beneficial use and will not jeopardize the health, safety, or welfare of the people in the city.

Chapter 15.24, Floodplain Management: Chapter 15.24 includes floodproofing requirements that apply to all areas of special flood hazards identified by FEMA within the jurisdiction of the City. No structures should be constructed, located, extended, converted, or altered without full compliance with the terms of this chapter, including the need for a development permit before any construction begins.

Chapter 17.38, Hillside Management: The intent and purpose of this chapter is to implement the goals and policies of the general plan and the various elements contained therein as they relate to development and resource management in hillside areas in the city. This chapter requires that grading plans be submitted to the City to provide erosion control measures that meet the specifications of the City's engineering design standards and building code.

5.10.1.2 EXISTING CONDITIONS

Watersheds

Moorpark is located entirely within the Calleguas Creek Watershed, a flood control zone monitored by the VCWPD and the Los Angeles RWQCB (see Figure 5.10-1, *Calleguas Creek Watershed*). Additionally, the Watersheds Coalition of Ventura County manages the Integrated Regional Water Management Planning program for all of Ventura County, including Calleguas Creek. The Calleguas Creek Watershed drains an area of 343 square miles in southern Ventura County and a small portion of western Los Angeles County. Within Ventura County, the Calleguas Creek Watershed consists of the Calleguas Creek, Arroyo Las Posas, Revolon Slough, Conejo Creek, Arroyo Conejo, Arroyo Santa Rosa, and Arroyo Simi (LARWQCB 2022a).

Surface Water

The city and its existing developments are entirely tributary to Arroyo Simi (a reach of Calleguas Creek), where flows travel generally southwesterly. Once flows pass the western edge of the city, the watercourse changes names to Arroyo Las Posas (another reach of Calleguas Creek). The major tributaries and flood

control facilities that run through the city and tie into Arroyo Simi include Peach Hill Wash, Gabbert Canyon, Walnut Canyon, Happy Camp Canyon, Strathearn Canyon, and No. 2 Canyon. VCWPD-maintained facilities include Gabbert Canyon, Walnut Canyon, Strathearn Canyon, and Happy Camp Canyon.

Ultimately, all storm drain channels converge with the Arroyo Simi, and downstream ends of the channel travel through the Oxnard Plain of Ventura County prior to discharging into Mugu Lagoon, which is an Area of Special Biological Significance, and finally into the Pacific Ocean.

Surface Water Quality

Under Section 303(d) of the Clean Water Act, states are required to identify water bodies that do not meet their water quality standards. Once a water body has been listed as impaired on the 303(d) list, a total maximum daily load for the constituent of concern (pollutant) must be developed for that water body. A TMDL is an estimate of the daily load of pollutants that a water body may receive from point sources, nonpoint sources, and natural background conditions (including an appropriate margin of safety) without exceeding its water quality standard. Facilities and activities that discharge into the water body, collectively, must not exceed the TMDL. In general terms, MS4 and other dischargers in each watershed are collectively responsible for meeting the required reductions and other TMDL requirements by the assigned deadline. Table 5.10-1, *List of 303(d) Impairments and TMDLs*, shows the 303(d) listed impairments established for 2020 to 2022 (LARWQCB 2022b).

Groundwater

The city overlies three groundwater basins: Las Posas Valley (east and south subbasins), Simi Valley, and Tierra Rejada (see Figure 5.10-2, *Groundwater Basins*). A majority of the city is over the East and South Las Posas Valley groundwater subbasins. Coverage over the Tierra Rejada basin includes the areas east of Weeping Willow Drive, west of SR-23, and south of Peach Hill Road. Coverage over the Simi Valley groundwater basin includes the areas east of Collins Drive and south of SR-118.

Since the City draws groundwater from the East Las Posas Valley groundwater subbasin, it must coordinate with the FCGMA, whose jurisdictional area encompasses about 118,000 acres (185 square miles). The FCGMA was initially created to manage the groundwater in overdrafted and potentially seawater-intruded areas in Ventura County. Its prime objective was to preserve groundwater resources for agricultural, municipal, and industrial uses. Specifically, in the East Las Posas Valley groundwater subbasin, chronic declines in groundwater elevation, loss of storage, and the potential for subsidence related to groundwater withdrawal were identified as having the potential to impact beneficial uses of groundwater.

The greater LPVB (comprising east, west, and south subbasins) is bounded on the south by the Camarillo and Las Posas Hills and on the north by South Mountain and Oak Ridge. Arroyo Simi has been identified as a surface water body that may have a connection to the East Las Posas Valley groundwater subbasin. However, the LPVB is not adjudicated, nor is it specifically identified as a basin in an overdraft condition. Nevertheless, according to the GSP that FCGMA developed in 2019, permits must be obtained from FCGMA prior to the construction of new wells.

Table 5.10-1 List of 303(d) Impairments and TMDLs

Water Body/Channel	List of 303(d) Impairments	TMDL Status
Arroyo Simi (Calleguas Creek Reach 7)	Ammonia	TMDL approved 06/20/2003
	Boron	TMDL approved 12/02/2008
	Chloride	TMDL approved 12/02/2008
	Chlorpyrifos[1]	TMDL approved 03/14/2006
	Diazinon[2]	TMDL approved 03/14/2006
	Indicator Bacteria	Expected TMDL Completion Date 2019
	Organophosphate Pesticides	TMDL approved 03/14/2006
	Sedimentation/Siltation	Expected TMDL Completion Date 2006
	Sulfates	TMDL approved 12/02/2008
	Total Dissolved Solids	TMDL approved 12/02/2008
	Toxicity	TMDL approved 03/14/2006
	Trash	Expected TMDL Completion Date 2021
Arroyo Las Posas (Calleguas Creek Reach 6)	Ammonia	TMDL approved 06/20/2003
	Chlordane[3]	TMDL approved 03/14/2006
	Chloride	TMDL approved 12/02/2008
	Chlorpyrifos	TMDL approved 03/14/2006
	DDT (sediment)[4]	TMDL approved 03/14/2006
	Diazinon	TMDL approved 03/14/2006
	Dieldrin[5]	TMDL approved 03/14/2006
	Indicator Bacteria	Expected TMDL Completion Date 2027
	Nitrate and Nitrite	TMDL approved 06/20/2003
	Nitrate as NO_3	TMDL approved 06/20/2003
	Sedimentation/Siltation	Expected TMDL Completion Date 2005
	Sulfates	TMDL approved 12/02/2008
	Total Dissolved Solids	TMDL approved 12/02/2008
	Toxicity	TMDL approved 03/14/2006
Calleguas Creek Reach 3	Ammonia	TMDL approved 01/01/2003
	Chlordane	TMDL approved 03/14/2006
	Chloride	TMDL approved 12/02/2008
	DDT	TMDL approved 03/14/2006
	Dieldrin	TMDL approved 03/14/2006
	Indicator Bacteria	Expected TMDL Completion Date 2027
	Nitrate and Nitrite	TMDL approved 06/20/2003
	PCBs	TMDL approved 03/14/2006
	Sedimentation/Siltation	Expected TMDL Completion Date 2015
	Total Dissolved Solids	TMDL approved 12/02/2008
	Toxaphene[6]	TMDL approved 01/01/2019
	Trash	Expected TMDL Completion Date 2021
Calleguas Creek Reach 2	Ammonia	TMDL approved 06/20/2003
	ChemA[7]	TMDL approved 03/24/2006
	Chlordane	TMDL approved 03/14/2006

Table 5.10-1 List of 303(d) Impairments and TMDLs

Water Body/Channel	List of 303(d) Impairments	TMDL Status
	Copper	TMDL approved 03/23/2007
	DDT	TMDL approved 01/01/2005
	Dieldrin	TMDL approved 03/04/2006
	Endosulfan[8]	TMDL approved 03/24/2006
	Indicator Bacteria	Expected TMDL Completion Date 2006
	PCBs	TMDL approved 01/01/2005
	Sedimentation/Siltation	Expected TMDL Completion Date 2005
	Toxaphene	TMDL approved 01/01/2005
	Toxicity	TMDL approved 01/01/2005
	Trash	Expected TMDL Completion Date 2021
Mugu Laggon (Calleguas Creek Reach 1)	Chlordane	TMDL approved 01/01/2005
	Copper	TMDL approved 03/23/2007
	DDT	TMDL approved 01/01/2005
	Dieldrin	TMDL approved 03/14/2006
	Endosulfan[8]	TMDL approved 03/24/2006
	Mercury	TMDL approved 03/26/2007
	Nickel	TMDL approved 03/23/2007
	Nitrogen	TMDL approved 06/20/2003
	PCBs	TMDL approved 01/01/2005
	Sedimentation/Siltation	TMDL approved 01/01/2007
	Toxaphene	TMDL approved 03/14/2006
	Toxicity	TMDL approved 01/01/2005
	Zinc	TMDL approved 03/23/2007

Source: LARWQCB 2022b.
[1] Chlorpyrifos is an organophosphate insecticide, acaricide and miticide used primarily to control foliage and soil-borne insect pests.
[2] Diazinon is an organophosphate insecticide used in agriculture to control insects on fruit, vegetable, nut, and field crops.
[3] Chlordane is an organochlorine compound that was used as a pesticide.
[4] DDT is an insecticide that was used in agriculture and banned in 1972.
[5] Dieldrin was produced as an insecticide from the 1950s to 1970, and was widely used as pesticide for corn, cotton, and citrus crops. It has long been banned.
[7] ChemA is a historic pesticide no longer used in the United States.
[8] Endosulfan is an off-patent organochlorine insecticide and acaricide that is being phased out globally.

Figure 5.10-1

Callegulas Creek Watershed

Ventura County Boundary
City Boundary
Calleguas Creek Watershed Boundary
Other Watersheds

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Draft Environmental Impact Report

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Source: PlaceWorks, 2022; California DFW, 2022

Date: 9/28/2022

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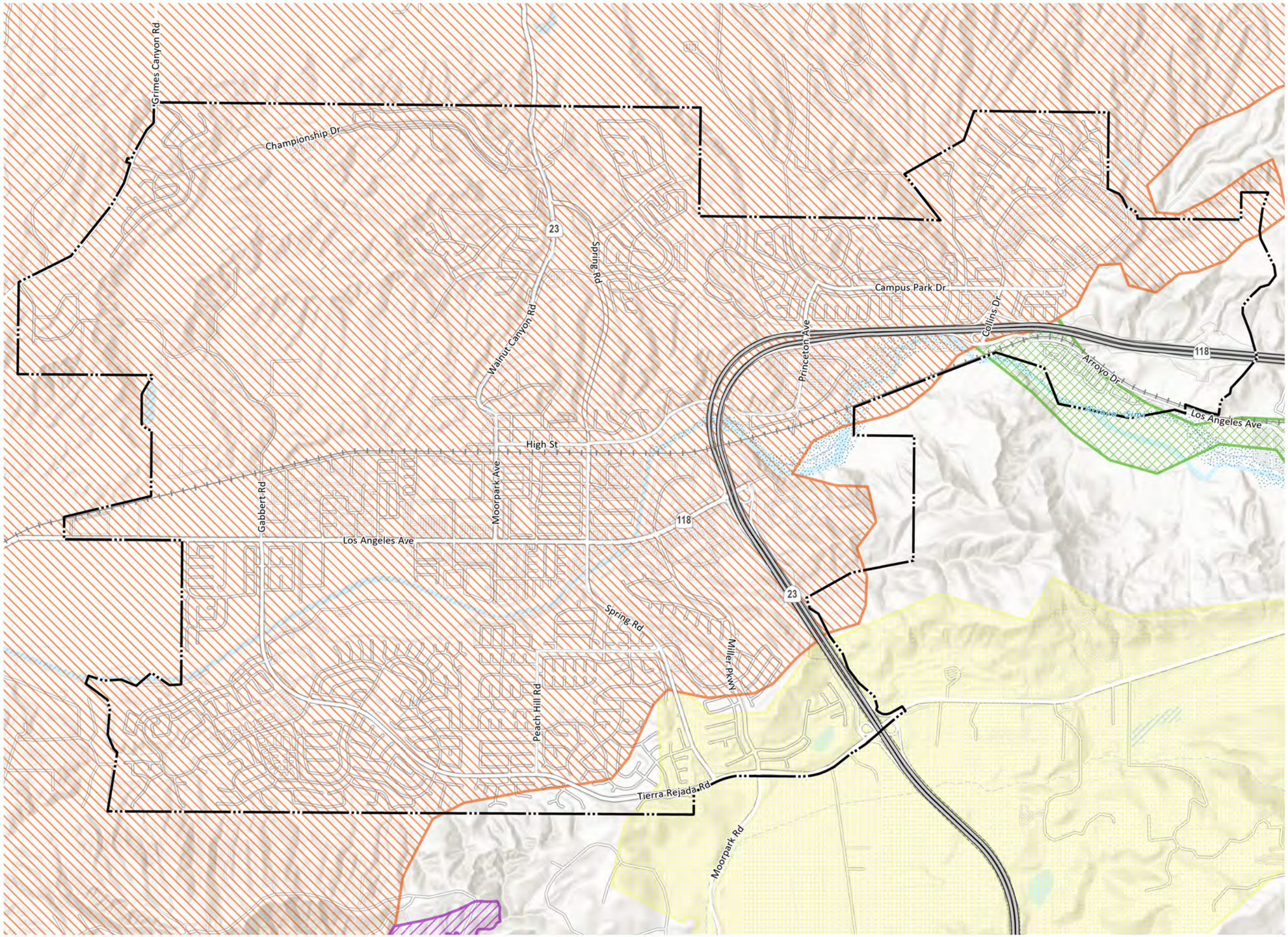

Hydrology

Figure 5.10-2

Groundwater Basins

City Boundary

Groundwater Basins

- ARROYO SANTA ROSA VALLEY
- LAS POSAS VALLEY
- SIMI VALLEY
- TIERRA REJADA

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Draft Environmental Impact Report

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Source: PlaceWorks, 2022; California DWR, 2022

Date: 9/28/2022

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Groundwater Recharge Facilities

The source of recharge to the East Las Posas Valley subbasin has changed significantly over the last 30 years with urban development of the Simi Valley and Moorpark areas. Prior to this, recharge was predominantly from rainfall on outcrop areas and from percolation of winter flood water along the Arroyo Las Posas. Studies show that groundwater in the central part of the East Las Posas subbasin is hundreds to thousands of years old, indicating a slow rate of historical recharge along the flanks of the basin.

Groundwater pumping in the East Las Posas Valley subbasin has resulted in falling groundwater levels in the eastern part of the subbasin, away from the recharge mound along the Arroyo Las Posas. The largest drop in groundwater levels (190 feet) was in this region from 1973 to 1998. Groundwater levels have stabilized somewhat across the subbasin since the late 1990s, at least in part because of the addition of in-lieu and injected recharge as part of the Las Posas Basin Aquifer Storage and Recovery project.

The Calleguas Municipal Water District operates an 18-well aquifer storage and recovery project in the East Las Posas subbasin to recharge the subbasin via injection of imported water. The program provides a source of local stored water during shutdowns of imported water supplies.

In the South Las Posas subbasin, groundwater levels have risen more than 100 feet over the past 40 years from increased percolation beneath the Arroyo Las Posas because discharges from the Moorpark and Simi Valley wastewater treatment plants and dewatering wells in Simi Valley have increased year-round flow in the Arroyo Las Posas (VCPW 2021).

Groundwater Quality

Increasing concentrations of salts (chloride, sulfate, sodium) in the part of the East Las Posas subbasin along the Arroyo Las Posas continue to be a problem.. The high salt concentrations in the shallow aquifer are associated with historically high groundwater levels, which apparently leach salts from previously unsaturated sediments in the shallow aquifer along the Arroyo Las Posas.

The Ventura County Waterworks District produces groundwater from the East Las Posas subbasin via five wells owned and operated by the district with a total system capacity of approximately 3,500 gallons per minute. In 2020, there were only four wells online to produce groundwater. The groundwater meets all State and federal water quality standards for drinking water, except that treatment is required at one of the well sites to lower iron and manganese levels. The groundwater is chlorinated at each well site before being pumped into the potable water distribution system. The four operational wells do not pump groundwater from the area along the Arroyo Las Posas and therefore do not have high salt concentrations.

Salts in the groundwater have increased in the South Las Posas subbasin with salts leaching from unsaturated sediments in the shallow aquifer as groundwater levels reached record highs. Due to high salinity, this groundwater is unsuitable for drinking water (VCPW 2021).

Storm Drain System

Storm drain main lines are primarily maintained by the City or private property owners, but the larger main drainages are maintained by VCWPD. Portions of the city also drain to watercourses that are under the jurisdiction of VCWPD. Storm drainpipe diameters range from 4 inches to 114 inches, and materials for storm drain structures include reinforced concrete pipe, extruded polyethylene coating, corrugated steel pipe, corrugated metal pipe, and cured-in-place pipe. The storm drain system in the city consists of 10 main storm drain facilities.

- **Arroyo Simi.** Arroyo Simi is the largest watercourse in the city and flows southwesterly through the middle portion of the city. Arroyo Simi becomes Arroyo Las Posas immediately west of the city's border. Approximately 5 miles of Arroyo Simi runs through the city. There is also a detention basin near Spring Road (VCWPD 2005). The Arroyo Simi and detention basin cannot detain the 100-year flood, and some urban areas of the city are in a FEMA Special Flood Hazard Area.

- **Castro-Williams Drain.** Castro-Williams Drain flows southerly toward Arroyo Simi in the northeastern portion of the city. A debris basin was constructed in the 1950s upstream of developed areas, near its confluence with Arroyo Simi near Los Angeles Avenue and Spring Street (VCWPD 2005).

- **Gabbert Canyon.** Gabbert Canyon drains southwesterly toward Arroyo Simi and flows through the northwestern portion of the city. This facility receives flow from the north portion of the city and from Walnut Canyon Channel before its confluence with Arroyo Simi. There is a debris basin near Gabbert Road and Aspen Hills Road. Gabbert Canyon upstream of the debris basin is under the jurisdiction of VCWPD.

- **Happy Camp Canyon.** Happy Camp Canyon is a large VCWPD-maintained wash in the northeastern portion of the city. Flows drain southwesterly into Arroyo Simi.

- **Moorpark Storm Drain No 1.** Moorpark Storm Drain No 1 is in the central portion of the city and drains southerly toward Walnut Canyon. This storm drain line crosses Princeton Avenue before discharging into Walnut Canyon near Princeton Avenue and Hedyland Court.

- **Moorpark Storm Drain No 2.** Moorpark Storm Drain No 2 is in the southwestern portion of the city and drains southerly towards Arroyo Simi. This storm drain line crosses West Los Angeles Avenue before discharging into Arroyo Simi directly south of the intersection between Shasta Avenue and West Los Angeles Avenue.

- **No 2 Canyon.** No 2 Canyon drains southwesterly into Arroyo Simi and is in the northeasternmost section of the city. Flows from No 2 Canyon converge with Arroyo Simi south of Moorpark College. There is a debris basin east of Moorpark College.

- **Peach Hill Wash.** Peach Hill Wash is a trapezoidal channel in the southwestern portion of the city and drains generally to the west before connecting with Arroyo Simi to the north. There is a retention basin adjacent to Mountain Trail Street in the Mount Meadows development.

- **Strathearn Canyon.** Strathearn Canyon is in the northeastern portion of the city. It consists primarily of a concrete trapezoidal channel and drains southeast into Arroyo Simi southwest of Moorpark College. North of Middle Ranch Road, Strathearn Canyon is a soft-bottom wash under VCWPD jurisdiction.

- **Walnut Canyon.** Walnut Canyon is in the northwest portion of the city and is tributary to Gabbert Canyon. Flows drain southerly and converge just west of the intersection of West High Street and Moorpark Avenue. The portion of the facility north of Waterworks Road is under the jurisdiction of the VCWPD. Basin 0 is just north of Meridian Hills Road.

Other facilities include Strathearn Canyon East Fork, Campus Road Canyon, Big Mountain Oil Field Canyon, North Basin, and the Home Acres Drain. The City maintains a master plan of drainage to ensure that storm drain facilities are functioning effectively and are protective of property and people. For an exhibit of the existing storm drain network, see Figure 5.10.3, *Existing Storm Drain Facilities*.

The City of Moorpark's 1995 Master Plan of Drainage (MPD) analyzed the capacity of the storm drain facilities in the city and identified any deficiencies or capital improvements needed, using the 50-year design storm to quantify peak runoff. Regional flood control facilities, such as detention basins, are sized for the 100-year storm event. This sizing criteria, along with flood capacities in the street, provide 100-year protection of structures throughout the city. This is in line with the FEMA Flood Insurance program, where all new developments and redevelopments must achieve 100-year storm protection. Land uses from the 1992 City General Plan were considered in computing imperviousness calculations, and geographical features and soil classifications were used to determine rate of runoff. Flow rates were calculated at select points of concentration and were used to evaluate existing systems as well as to plan for needed additional facilities within those drainage areas.

According to the 1995 MPD, approximately 13 proposed improvements were identified. These proposed facilities were sized according to deficiencies found in older infrastructure. Locations for all proposed drainage facilities were mapped in the 1995 MPD. These improvements are summarized in Table 5.10-2, *Drainage Master Plan Proposed Project List*. The table also includes updates from the City's Public Works Department on the status of the improvement projects.

Table 5.10-2 Drainage Master Plan Proposed Project List

Description	2020 Updates from City Public Works Department
Spring Road Drain – North of High Street	No new updates since 1995 MPD
Moorpark Avenue Drain	Completed in 1997 as stated in City's current CIP list
Bard Street Catch Basin	No new updates since 1995 MPD
Shasta Drain – Shasta Avenue	A portion of Shasta drain, north of Los Angeles Avenue, is approved for construction in the Adopted Operating and Capital Improvement Projects Budget, Fiscal Year 2022-2023

Table 5.10-2 Drainage Master Plan Proposed Project List

Description	2020 Updates from City Public Works Department
Shasta Drain – Lassen Avenue to Poindexter	No new updates since 1995 MPD
Liberty Bell Drain	No new updates since 1995 MPD
Arroyo Vista Park Drain	No new updates since 1995 MPD
Spring Road Drain – Los Angeles Avenue to Minor Street	Completed in 1997
Fremont Drain (Millard Drain)	The Millard Drain project, north of Los Angeles Avenue, is approved for construction in the Adopted Operating and Capital Improvement Projects Budget, Fiscal Year 2022-2023
Lorraine Lane Drain	Completed in 2004
New Los Angeles Avenue Drain	Completed in 2000
Science Drive Drain	Completed in 1998
Park Lane Drain	No new updates since 1995 MPD

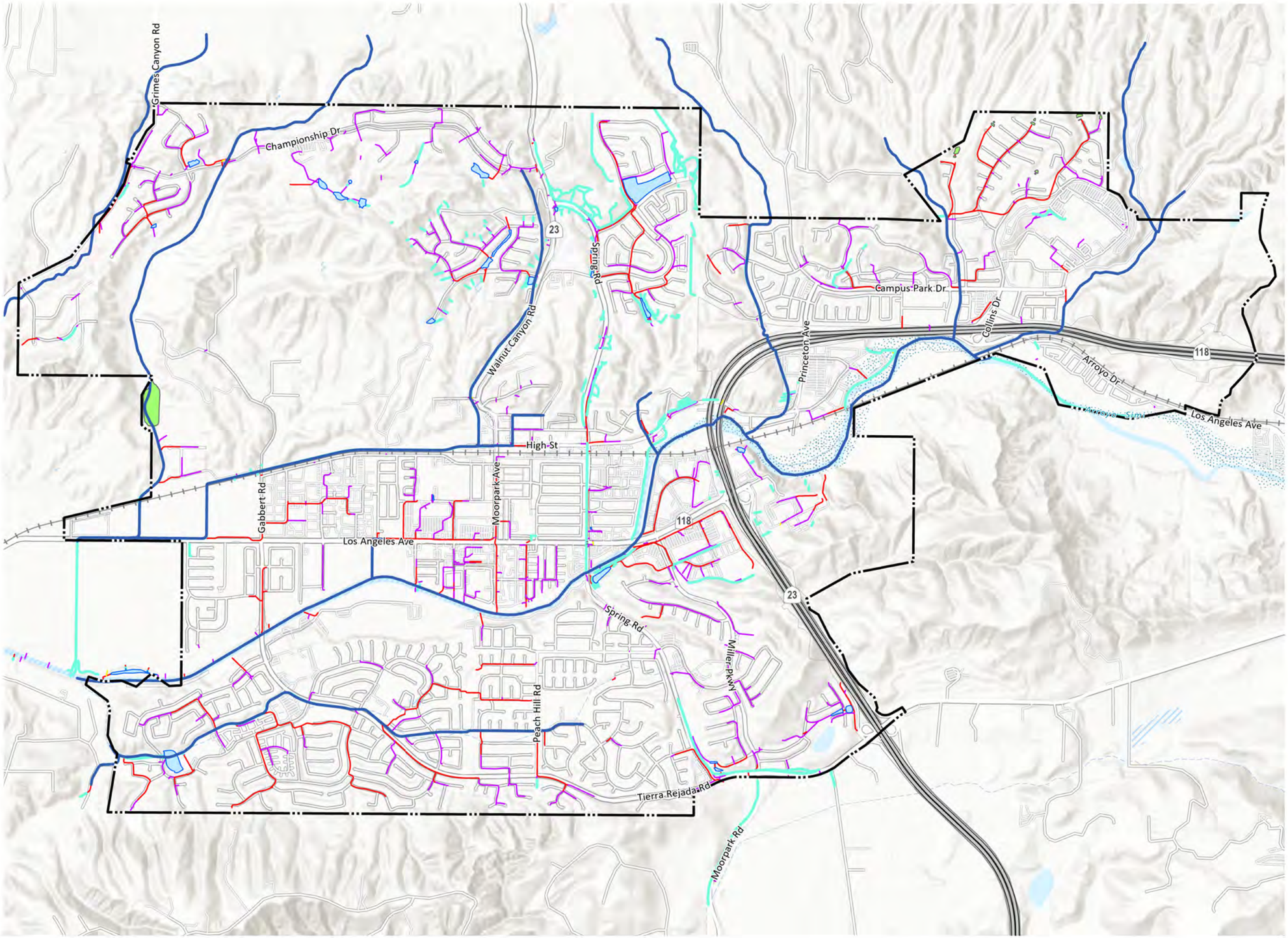
Source: Fuscoe 2022.

Since the 1995 MPD, improvements have been made to the storm drain system, and ongoing monitoring occurs through the City Public Works Department. Out of the 13 projects listed in the 1995 MPD, 5 have been completed. Another 2 projects are either in design, in construction, or have had funding approved. The remaining 6 projects have not yet been executed or approved.

In addition to tracking projects from the 1995 MPD, the City manages storm drain projects on an annual basis through the adopted operating and capital improvement projects (CIP) budget. After determining several projects with the highest priority, the selected projects are incorporated into the current fiscal year budget. The projects on the 2022-2023 budget are listed in Table 5.10-3, *Current City CIP List*. Additionally, the County prepares a CIP plan every five years to ensure countywide needs are met. This five-year plan involves all County departments and agencies. Each department/agency reviews capital needs for a five-year period, then submits CIP requests to the Capital Planning Committee for review and prioritization. Improvements to storm drain infrastructure are included in the Watershed Protection Plan. The planned projects in Moorpark on the County's 2022-2027 CIP Plan are also included in Table 5.10-3.

Figure 5.10-3

Existing Storm Drain Facilities



City Boundary
Rivers/Streams
Casing
Detention Basins
Debris Basins

County Storm Drain Facilities

Channel

City Storm Drain Facilities

4"-10" Storm Drain Pipe
10"-30" Storm Drain Pipe
30"+ Storm Drain Pipe

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Draft Environmental Impact Report

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Source: PlaceWorks, 2022; Date: 9/28/2022

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Table 5.10-3 Current City CIP List

Project Name	Description	Jurisdiction	Project Cross-Listed in City 1995 MPD	2020 Updates from City Public Works Department
Shasta Drain	Construction of storm drainage infrastructure improvements to serve the residential area north of the intersection of Los Angeles Avenue and Shasta Avenue.	City	Yes	A portion of Shasta drain, north of Los Angeles Avenue, is approved for construction.
Millard Drain	Construction of storm drainage infrastructure improvements to serve the residential area north of the intersection of Los Angeles Avenue and Millard Street.	City	Yes	The Millard Drain project, north of Los Angeles Avenue, is approved for construction.
Los Angeles Avenue Widening – Spring Road to Moorpark Avenue	Street widening and improvements for additional vehicle travel lanes, an emergency lane, curb and gutter, and sidewalk along the south side of Los Angeles Avenue, from Moorpark Avenue to Spring Road. Project scope of work will also include storm drainage infrastructure improvements along the south side of Los Angeles Avenue.	City	No	No updates from City staff.
Arroyo Simi Grade Stabilization at Leta Yancy	Project scope includes the design and reconstruction of the existing damaged stabilizer downstream of Leta Yancy to eliminate scour and degradation in the project reach.	County	No	No updates from City staff.
Castro Williams Debris Basin Safety Retrofits	Retrofit or replace the existing emergency spillway to meet dam freeboard requirements.	County	No	No updates from City staff.

Source: Fuscoe 2022.

For an exhibit of future projects proposed for the storm drain network, see Figure 5.10-4, *Existing Storm Drain System Recommended Improvements*.

Flood Hazards

Flood Zones

According to the flood zone determination shown on Figure 5.10-5, *Flood Zones*, many of the regions in the northernmost and southernmost parts of the city are designated Zone X (unshaded). Zone X (unshaded) is defined as the area determined to be outside the 500-year flood and protected by levee from 100-year flood. A "letter of map revision" updated the flood insurance rate maps in this area, and existing homes and buildings, now in a floodplain, require property owners to obtain flood insurance. Portions of the city in the area adjacent to the north bank of the Arroyo Simi are Zone X (shaded). Zone X (shaded) correlates to areas between the limits of the 100-year and 500-year floods, areas of 1 percent annual chance flood[3] with an average depth of less than one foot, and drainage areas of less than one square mile. Scattered portions of

[3] Areas of 1 percent annual chance flood correlate to areas within the 100-year flood zone.

the city are designated Zone A, which represents areas with a 1 percent annual chance of flooding and a 26 percent chance of flooding over the life of a 30-year mortgage. The Arroyo Simi, Walnut Canyon, Peach Hill Wash, and Happy Camp Canyon are also designated Zone A. Peach Hill Wash and Arroyo Simi are designated "regulatory floodways."[4]

Seismically Induced Dam Inundation

The dam inundation areas of the Las Llajas, Sinaloa Lake, Sycamore Canyon, and Wood Ranch dams extend into the city, as shown on Figure 5.10-6, *Dam Inundation Areas*. In the city, the dam inundation areas for the Las Llajas and Sycamore Canyon dams are primarily contained within the banks and floodplains of the Arroyo Simi. However, the Villa Del Arroyo housing development, south of West Los Angeles Avenue, is in the dam inundation area of both dams. The inundation area for the Wood Ranch dam extends into developed areas adjacent to the floodplains of the Arroyo Simi, including the central portion of the city north of the Arroyo Simi (see Figure 5.10-6). The inundation area includes residential, industrial, commercial, and public uses. The dam inundation area for the Sinaloa Lake dam is entirely contained within the banks and floodplains of the Arroyo Simi.

The Las Llajas dam was built in 1981 and is owned and operated by the VCWPD. The dam has a capacity of 1,250 acre-feet, is 96 feet high, and is an earthen dam. The dam's downstream hazard is extremely high.[5] The Sycamore Canyon dam is 40 feet high, has a capacity of 890 acre-feet, and is an earthen dam. The dam is also owned and operated by the VCWPD, was built in 1981, and has a downstream hazard that is extremely high. The Wood Ranch dam was built in 1965 and is owned and operated by the Calleguas Municipal Water District. The dam is 146 feet high, is an earthen dam, and has a capacity of 11,000 acre-feet. The dam's downstream hazard is extremely high. All three dams are functioning at a satisfactory level with no existing or potential dam safety deficiencies. All three dams have acceptable performance standards for all loading conditions (including seismic conditions) in accordance with the minimum applicable state or federal regulatory criteria or tolerable risk guidelines (DSOD 2021).

Seiches

A seiche is a surface wave created when an inland water body is shaken, usually by an earthquake or due to a change in atmospheric pressure. Inland water bodies in the plan area that could generate seiches are retention basins and reservoirs and include the Bard Reservoir and Sinaloa Lake.

Tsunami

A tsunami is a series of ocean waves caused by a sudden displacement of the ocean floor, most often due to earthquakes. The city's southernmost boundary is about 14 miles inland from the Pacific Ocean; therefore, the chances of a tsunami impacting the city are negligible.

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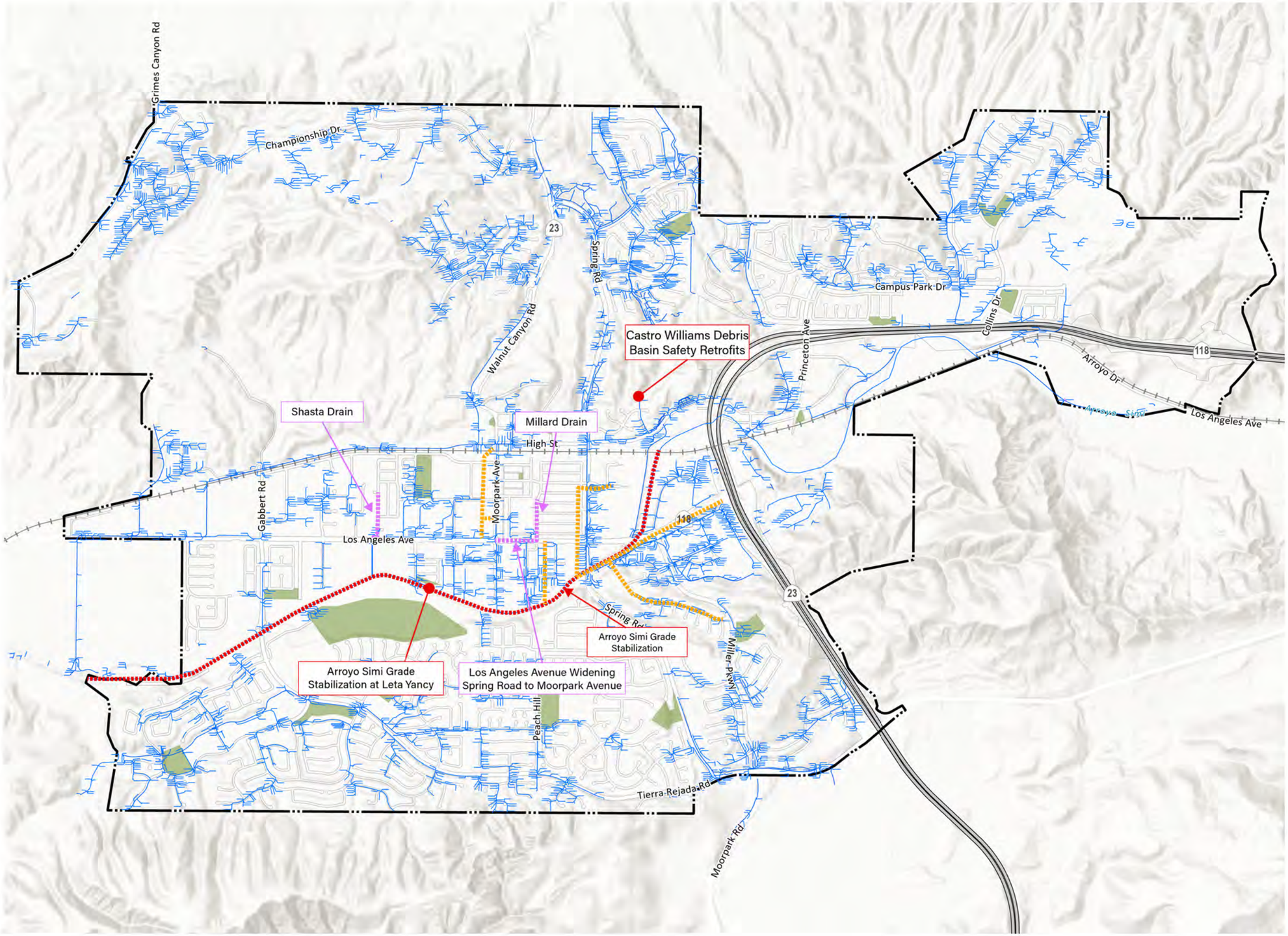
[4] A "regulatory floodway" means the channel of a river or other watercourse and the adjacent land areas that must be reserved in order to discharge the flow from a 100-year flood without cumulatively increasing the water surface elevation more than a designated height.

[5] The downstream hazard is based solely on potential downstream impacts to life and property should the dam fail when operating with a full reservoir. This hazard is not related to the condition of the dam or its appurtenant structures.

Figure 5.10-4

Existing Storm Drain System Recommended Improvements



City Boundary

Parks

Completed Pipeline & channel Improvements

County Drainage Improvements - Ventura county Public works Five-Year Capital Improvement Program

City Drainage Improvements - Adopted Operating and Capital Improvement Projects Budget, Fiscal Year 2022-2023

Storm Drain Pipe

MADE BY MOORPARK General Plan 2050

Draft Environmental Impact Report

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Source: PlaceWorks, 2022; Date: 10/6/2022

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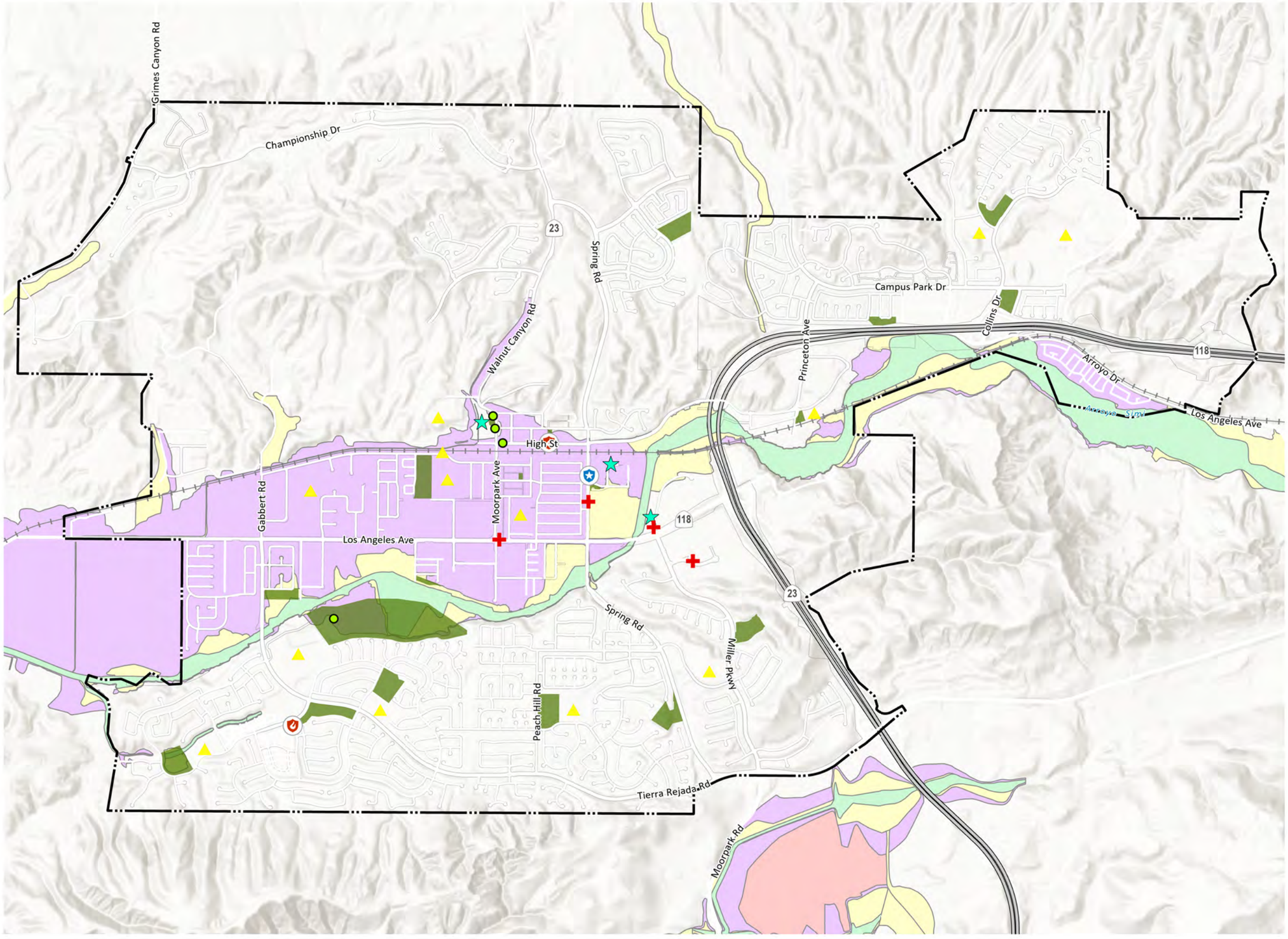
Hydrology

Figure 5.10-5
Flood Zones



City Boundary
Police Services Center
Fire Station
Community Facility
Government Facility
Medical
School/College Campuses
Parks

FEMA Flood Zones
Zone A, 1% Annual Chance Flood Hazard
Zone X, 0.2% Annual Chance Flood Hazard
Zone X, 0.2% Annual Chance Flood Hazard with Reduced Risk Due to Levee
Regulatory Floodway

MADE BY MOORPARK General Plan 2050

Draft Environmental Impact Report

0 1,000 2,000 4,000 FT

Source: PlaceWorks, 2022; FEMA, 2021; DWR, 2021

Date: 10/6/2022

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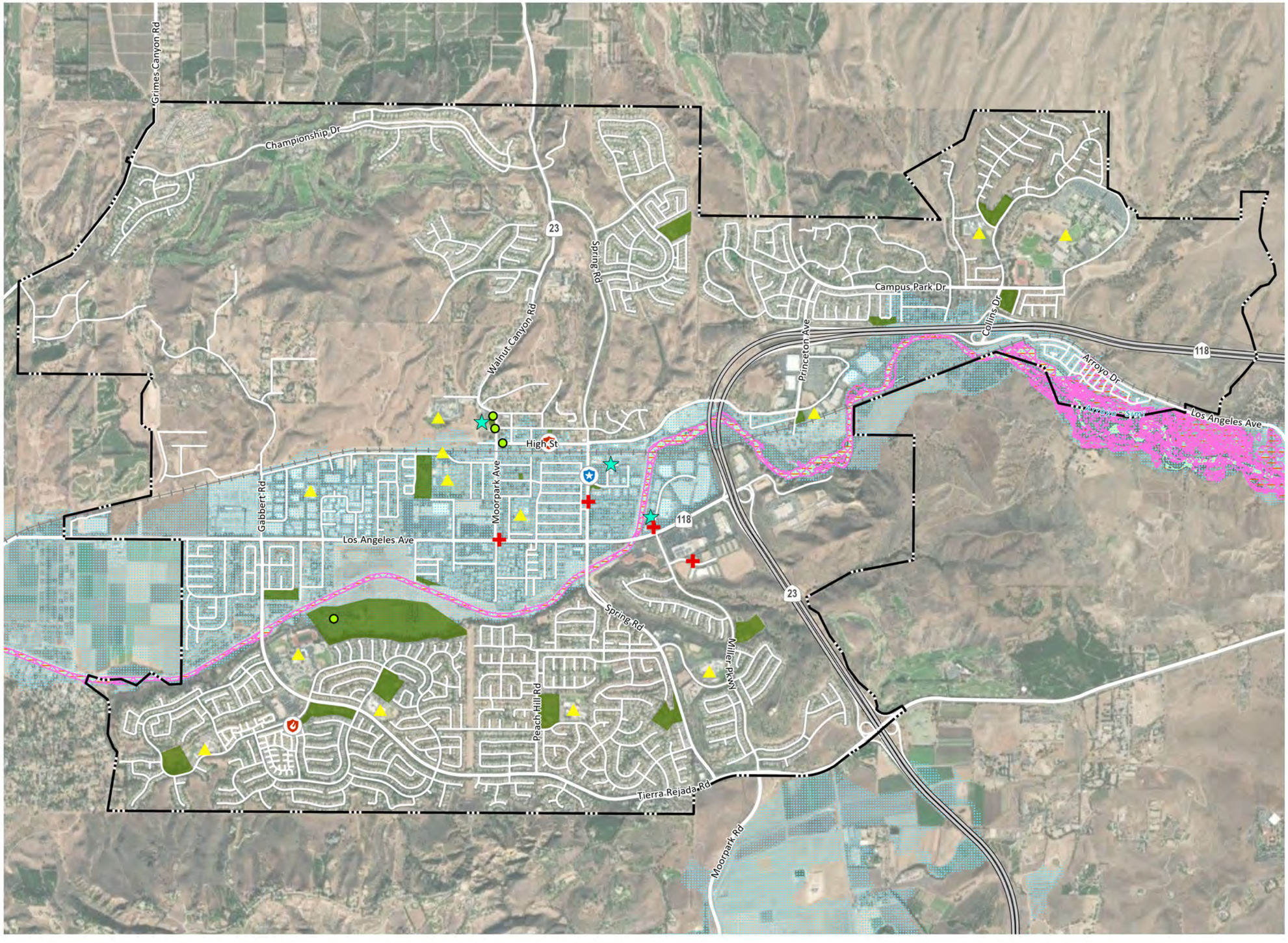
Figure 5.10-6

Dam Inundation Areas



City Boundary
Sinaloa Lake Inundation Area
Sycamore Canyon Inundation Area
Las Llajas Inundation Area
Wood Ranch Inundation Area
Police Services Center
Fire Station
Community Facility
Government Facility
Medical
School/College Campuses
Parks

MADE BY MOORPARK General Plan 2050

Draft Environmental Impact Report

0 1,000 2,000 4,000 FT

Source: PlaceWorks, 2022; DWR, 2021 Date: 10/6/2022

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5.10.2 Thresholds of Significance

According to Appendix G of the CEQA Guidelines, a project would normally have a significant effect on the environment if the project would:

HYD-1 Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality.

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

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

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

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

5.10.3 Environmental Impacts

The applicable thresholds are identified in brackets after the impact statement.

Impact 5.10-1: Projects pursuant to the Moorpark General Plan 2050 would not violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality. [Thresholds HYD 1 and HYD-3 (i)]

Discharges from Construction Sites to Stormwater

Buildout under the Moorpark General Plan 2050 would involve soil disturbance, construction, and operation of developed land uses that could generate pollutants affecting stormwater. Buildout will involve the construction of an additional 5,488 housing units and approximately 4.8 million square feet of nonresidential land uses compared to existing conditions.

Clearing, grading, excavation, and construction activities associated with the Moorpark General Plan 2050 have the potential to impact water quality through soil erosion and increasing the amount of silt and debris carried in runoff. Additionally, the use of construction materials such as fuels, solvents, and paints may present a risk to surface water quality. Finally, the refueling and parking of construction vehicles and other equipment on-site during construction may result in oil, grease, or related pollutant leaks and spills that may discharge into the storm drain system.

To minimize these potential impacts, proposed development must comply with the Construction General Permit Water Quality Order 2009-0009-DWQ (as amended by Order No. 2010-0014-DWQ and 2012-006-DWQ), which requires the preparation and implementation of a SWPPP. A SWPPP requires the incorporation of BMPs to control sediment, erosion, and hazardous materials contamination of runoff during construction and prevent contaminants from reaching receiving water bodies. The SWRCB mandates that projects that disturb one or more acres of land obtain coverage under the Statewide CGP. The CGP also requires that prior to the start of construction activities, the project applicant must file PRDs with the SWRCB, which include a notice of intent, risk assessment, site map, annual fee, signed certification statement, SWPPP, and post-construction water balance calculations. The construction contractor is required to maintain a copy of the SWPPP at the site and implement all construction BMPs identified in the SWPPP. Prior to the issuance of a grading permit, the project applicant is required to provide proof of filing of the PRDs with the SWRCB, which includes preparation of a SWPPP. Categories of potential BMPs that could be implemented at proposed development sites are described in Table 5.10-4, *Construction BMPs*.

Table 5.10-4 Construction BMPs

Category	Purpose	Examples
Erosion Controls	Protects the soil surface and prevents soil particles from being detached by rainfall, flowing water, or wind.	Scheduling, preserving existing conditions, mulch, soil binders, geotextiles, mats, hydroseeding, earth dikes, swales, velocity dissipating devices, slope drains, streambank stabilization, compost blankets, soil preparation/roughening, and non-vegetative stabilization.
Sediment Controls	Traps soil particles after they have been detached and moved by rain, flowing water, or wind.	Barriers such as silt fences, straw bales, sandbags, fiber rolls, and gravel bag berms; sediment basins; sediment traps; check dams; storm drain inlet protection; compost socks and berms; biofilter bags; manufactured linear sediment controls; and cleaning measures such as street sweeping and vacuuming
Wind Erosion Controls	Minimizes dust nuisances.	Applying water or other dust palliatives to prevent or minimize dust nuisance, reducing soil-moving activities during high winds, and installing erosion control BMPs for temporary wind control.
Tracking Controls	Prevents or reduces the tracking of soil offsite by vehicles	Stabilized construction roadways and construction entrances/exits and entrance/outlet tire wash.

Table 5.10-4 Construction BMPs

Category	Purpose	Examples
Non-Storm Water Management Controls	Prevents pollution by limiting or reducing potential pollutants at their source or eliminating off-site discharge. Prohibits illicit connections or discharges.	Water conservation practices, BMPs specifying methods for: dewatering operations; temporary stream crossings; clear water diversions; pile driving operations; temporary batch plants; demolition adjacent to water; materials over water; potable water and irrigation; paving and grinding operations; cleaning, fueling, and maintenance of vehicles and equipment; concrete curing; concrete finishing.
Waste Management and Controls (i.e., good housekeeping practices)	Management of materials and wastes to avoid contamination of stormwater.	Proper material delivery and storage and material use, spill prevention and control, stockpile management, contaminated soil management, and management of solid, concrete, sanitary/septic, liquid, and hazardous wastes.

Source: CASQA 2019.

Submittal of the PRDs and implementation of the SWPPP throughout the construction phase of projects pursuant to the Moorpark General Plan 2050 would address anticipated and expected pollutants of concern as a result of construction activities.

Additionally, any proposed development with dewatering activities would abide by the requirements of the SWRCB's General Waste Discharge Requirements for Discharges to Land with a Low Threat to Water Quality and the Los Angeles RWQCB–adopted Order No. R4-2018-0215, as applicable. Any future construction activities that could impact jurisdictional waters or wetlands would require a permit and/or a water quality certification pursuant to sections 401 and 404 of the CWA. Any activities that construct, modify, or destroy wells would comply with the requirements of Section 13751 of the California Water Code. Chapter 8.52, Stormwater Quality Management: Additionally, all construction activities would comply with the requirements of Chapters 8.52, 8.40, and 17.38 of the City's municipal code. As a result, water quality impacts associated with construction activities would be less than significant.

Discharges from Developed Land Uses (Postconstruction) to Stormwater

With the proposed land use changes, development resulting from the Moorpark General Plan 2050 may have long-term impacts on the quality of stormwater and urban runoff, subsequently impacting downstream water quality. Developments can potentially create new sources for runoff contamination through changing land uses. As a consequence, proposed developments may have the potential to increase the postconstruction pollutant loadings of certain constituent pollutants associated with the proposed land uses and their associated features, such as landscaping and plaza areas.

To help prevent long-term impacts associated with land use changes and in accordance with the requirements of the MS4 permit, the TGM, and Chapter 8.52 of the municipal code, designated new development and significant redevelopment projects must incorporate low-impact development (LID), site design, and source

control BMPs to address postconstruction stormwater runoff management. In addition, priority projects are required to implement site design/LID and source control BMPs applicable to their specific priority project categories as well as implement treatment control BMPs where necessary. Selection of LID and additional treatment control BMPs is based on the pollutants of concern for the specific project site and the BMP's ability to effectively treat those pollutants, in consideration of site conditions and constraints. Further, priority projects must develop a project-specific postconstruction stormwater management plan that describes the menu of BMPs chosen for the project and includes operation and maintenance requirements for all structural and any treatment control BMPs.

Since the Moorpark General Plan 2050 does not include a specific or detailed development plan, project-specific stormwater management plans would not be required at this time. Future project-specific stormwater management plan, preliminary and/or final, would be prepared consistent with the prevailing terms and conditions of the MS4, the TGM, and Chapter 8.52 of the municipal code at the time of project application. Moreover, LID and water quality treatment solutions prescribed in a project-specific stormwater management plan shall be designed to support or enhance the regional BMPs and efforts implemented by the City to improve water quality. Furthermore, Chapter 8.52 prohibits illicit connections to the storm drainage system and forbids prohibited discharges. All development that discharges stormwater associated with industrial activity shall also comply with the requirements of the General Industrial Permit (Order No. CAS000001). Additionally, the City of Moorpark is mandated to comply with the requirements of the statewide mandate to reduce trash in receiving waters. Those requirements include the installation and maintenance of trash-screening devices at all public curb inlets, grate inlets, and catch basin inlets. The trash-screening devices must be approved by the local agency and consistent with the minimum standards of the trash TMDL.

Drainage patterns would largely be maintained and would utilize the existing drainage facilities in the public right-of-way. Current runoff is captured and conveyed by existing storm drain infrastructure throughout the city before discharging to County drainage channels and to the Pacific Ocean. Additionally, increased instability and erosion due to increased runoff volumes, flow durations, and higher stream velocities—i.e., hydromodification impacts—would need to be mitigated through the requirements of the Ventura County Hydromodification Control Plan and the hydromodification control criteria stipulated in the MS4 permit.

Policies LU-3.6, LU-6.7, LU-8.5, LU-8.6, LU-16.9, and LU-19.5 of the proposed Land Use Element; Policies CI-3.2, CI-8.2, CI-8.4, CI-8.5, CI-8.6, CI-9.1, CI-11.3, and CI-11.4 of the proposed Circulation Element promote water pollution control; low impact sustainable landscaping techniques; stormwater BMP inspection and maintenance; sustainable streetscapes; containment, harvest, and reuse of stormwater runoff; and multibenefit stormwater projects. Policies COS-1.9 through COS-1.15, COS-5.2, COS-5.3, and COS-7.4 of the Conservation Element further promote the conservation and protection of water quality through cooperative local and regional efforts, education, development requirements, and continued compliance with water quality regulations.

Therefore, with the implementation of state, regional, and local regulatory requirements, and proposed policies, development pursuant to the Moorpark General Plan 2050 would not violate any water quality standards or waste discharge requirements or result in a substantial erosion or siltation on- or off-site.

Level of Significance Before Mitigation: Less than significant.

Impact 5.10-2: Projects pursuant to the Moorpark General Plan 2050 would increase the demand on groundwater use but would not impede sustainable groundwater management of the basin. [Threshold HYD 2]

Ventura County Waterworks District (VCWD) No. 1 supplies water to the City and extracts 20 percent of its total water supply from local groundwater. Implementation of the Moorpark General Plan 2050 has the potential to increase water demand by 2,069 acre-feet per year. However, the Moorpark Infrastructure CEQA Technical Report (see Appendix H) showed that the projected increase in water demand from proposed development at buildout is within the projected total water demand for 2045 in the 2020 Urban Water Management Plan for normal, dry year, and multiple dry year scenarios. Therefore, it is not anticipated that implementation of the Moorpark General Plan 2050 would exceed projected long-term water supplies.

Additionally, the Las Posas Valley groundwater basin underlies Moorpark and is managed by the FCGMA. A GSP is in place to protect the groundwater by monitoring groundwater elevations and quality. Development projects would be required to infiltrate stormwater, where feasible, to recharge groundwater and meet water quality standards. To protect the groundwater basin, infiltration would not be allowed in areas with a history of contamination or within 100 feet of potable wells, nonpotable wells, drain fields, and springs. Furthermore, FCGMA oversees groundwater recharge and groundwater levels and has multiple mechanisms to prevent groundwater overdraft, as noted in the GSP. The GSP will be updated and resubmitted every five years as part of SGMA requirements.

Furthermore, Policy LU-8.6 of the proposed Land Use Element, Policy CI-8.4 of the proposed Circulation Element, and Policy COS-5.3 of the proposed Conservation Element promote the use of green infrastructure that increase stormwater infiltration into groundwater. Therefore, impacts to the sustainable management of groundwater would be less than significant.

Level of Significance Before Mitigation: Less than significant.

Impact 5.10-3: Projects pursuant to the Moorpark General Plan 2050 would increase the amount of impervious surfaces in the plan area, but would not substantially increase the rate or amount of surface runoff in a manner which would result in flooding off-site or on-site, or contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems. [Thresholds HYD-3 (ii) and (iii)]

Improvement projects for the City's storm drainage system have been identified in the City's 1995 MPD, the City's adopted operating and capital improvement projects budget for fiscal year 2022-2023, and the County's 2022-2027 CIP plan. Figure 5.10-4 shows these projects in addition to 21 opportunity sites throughout the city. Opportunity sites are sites that would include most of the land use changes and proposed increases in land use density proposed by the Moorpark General Plan 2050. Currently, no City drainage improvement projects are proposed downstream of opportunity sites. It is anticipated that currently vacant land in opportunity sites would produce the largest change in peak flow runoff due to the change in impervious area. This includes opportunity sites 1, 3a to c, 5 to 7, 11, and 15 to 18. There are no downstream storm drain

improvement projects that would be impacted by the development in these opportunity sites. However, if a deficiency in the capacity of the drainage systems downstream of vacant sites is identified in the future, the City and/or County could require improvements for those developments. The City has policies in place that require a developer to enter a cost-share mechanism to improve the storm drainpipe or require on-site detention for the project. These programs and regulations will prevent runoff that would exceed the capacity of stormwater drainage systems or sources that exceed pollutant limits. Additionally, the County has been improving Arroyo Simi for grade stabilization to protect the waterway from erosion. The County may require detention systems to prevent siltation and protect the structure of the receiving water bodies.

The City also has a process in place for identifying and prioritizing drainage improvements through master planning efforts, CIP projects, and project-by-project specific requirements. Per the City's municipal code, prior to the issuance of a grading permit or final map approval, applicants must identify any necessary storm drain improvements and temporary and permanent BMPs for the control of nonpoint water discharges, to ensure flood protection as well as protection of water quality. In addition, drainage improvements must be designed so that postdevelopment drainage to adjacent parcels would not be increased above predevelopment drainage quantities for any storm event between and including the 10-year and 100-year storms. All drainage measures necessary to mitigate stormwater flows must be provided to the satisfaction of the City engineer and public works director. The applicant shall make any on-site and downstream improvements required by the City to support the proposed development. Peak flows would also be decreased overall due to the implementation of landscaping requirements and LID features associated with water quality regulations, as described in Impact 5.10-1.

Furthermore, Policy LU-1.4 of the proposed Land Use Element and Policies CI-8.1 through CI-8.3 of the proposed Circulation Element require expanding and maintaining storm drain facilities to accommodate the needs of existing and planned development, managing the City storm drain infrastructure to reduce flooding, and coordinating with the Ventura County Watershed Protection District on flood control management and CIP projects to minimize impacts to City drainage features and establish fair and practical cost-sharing mechanisms. Therefore, impacts due to development pursuant to the Moorpark General Plan 2050 would be less than significant.

Level of Significance Before Mitigation: Less than significant.

Impact 5.10-4: In flood hazard, tsunami, or seiche zones, development pursuant to the Moorpark General Plan 2050 would not risk release of pollutants due to project inundation or impede or redirect flood flows. [Thresholds HYD-3 (iv) and HYD-4]

Portions of the city are designated Zone X and Zone A, as shown on Figure 5.10-5. As applicable, developments would show FEMA flood zones on the site plan and building sites may be subject to a City floodplain development permit or flood zone clearance. All development projects would comply with the requirements of Chapter 15.24 of the municipal code, which includes floodproofing requirements that apply to all areas of special flood hazards identified by FEMA within the jurisdiction of the City. No structures would be constructed, located, extended, converted, or altered without full compliance with the terms of this chapter, including the need for a development permit before any construction begins.

As shown on Figure 5.10-6, the dam inundation areas of the Las Llajas, Sinaloa Lake, Sycamore Canyon, and Wood Ranch dams extend into the city. Dams in California are monitored and inspected annually by the DSOD. In addition, dam owners are required to maintain emergency action plans that include procedures for damage assessment and emergency warnings. An emergency action plan identifies potential emergency conditions at a dam and specifies preplanned actions to help minimize property damage and loss of life should those conditions occur. It also contains procedures and information that instruct dam owners to issue early warning and notification messages to downstream emergency management authorities. The Las Llajas, Sinaloa Lake, Sycamore Canyon, and Wood Ranch dams have been assessed by DSOD to have no existing or potential dam safety deficiencies. Acceptable performance is expected under all loading conditions (static, hydrologic, seismic) in accordance with the applicable regulatory criteria or tolerable risk guidelines for all three dams (DSOD 2021). Therefore, impacts due to inundation are less than significant.

The Bard Reservoir and Sinaloa Lake could generate seiches as the result of an earthquake or other disturbance, but the flooding impact would be less than for the dam inundation zones. Also, the city is about 14 miles inland from the Pacific Ocean; therefore, the chances of a tsunami impacting the plan area are negligible.

As noted in Impact 5.10-3, the City and County regularly maintain and improve storm drain and flood control infrastructure based on priority, and new developments will comply with all pertinent flood control regulation. Furthermore, the following proposed policies, as shown in Section 5.10.5, would further reduce flooding impacts: Land Use Element Policies LU-7.4 and LU-7.5; Circulation Element Policy CI-8.3; Open Space, Parks, and Recreation Element Policies OSPR-1.9 and OSPR-6.1; and Safety Element Policies SE-1.14 and SE-3.1 through SE-3.9.

Therefore, impacts from floods, dam inundation, tsunamis, or seiches would be less than significant.

Level of Significance Before Mitigation: Less than significant.

Impact 5.10-5: Projects pursuant to the Moorpark General Plan 2050 would not conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan. [Threshold HYD-5]

New development and redevelopment pursuant to the Moorpark General Plan 2050 would implement the requirements of the CGP, the MS4 Permit, the TGM, and Chapter 8.52 of the City's municipal code. Furthermore, industrial development and redevelopment would abide by the General Industrial Permit, and well installation or decommissioning would be conducted in accordance with Section 13751 of the Water Code.

Adherence to these regulatory requirements would ensure that surface and groundwater quality are not adversely impacted during construction and operation of proposed development. As a result, site development would not obstruct or conflict with the implementation of the Basin Plan. Additionally, the FCGMA manages withdrawals from the Las Posas Valley Basin to ensure withdrawals do not exceed the safe yield for the basin. As discussed in Impact 5.10-2, increased demand due to development pursuant to the Moorpark General Plan 2050 would not adversely impact the sustainable management of the basin.

Therefore, the proposed project would not obstruct or conflict with the GSP, and impacts would be less than significant.

Level of Significance Before Mitigation: Less than significant.

5.10.4 Relevant General Plan Policies

Land Use Element

- **Policy LU-1.4 Public services to support growth.** Coordinate new development and redevelopment of existing properties to ensure that the existing and planned capacity of public facilities and services shall not be adversely impacted.
- **Policy LU-1.5 Development timing.** Manage new development and redevelopment to ensure that it is orderly with respect to location, timing, and density/intensity; concurrent with the provision of local public services and facilities; and compatible with the overall community character.
- **Policy LU-3.6 Industries and jobs.** Prioritize the development of industries that have limited emissions, meet local, regional, and state air and water pollution control goals and standards, and are designed to be compatible with surrounding land uses.
- **Policy LU-6.7 Protection from environmental hazards.** Prohibit or effectively control land uses that pose potential environmental hazards to Moorpark's neighborhoods and districts.
- **Policy LU-7.4 Open space corridor.** Preserve and enhance the flood control easement area adjacent to the Arroyo Simi floodway as an important natural and scenic feature of the community.
- **Policy LU-7.5 Arroyo Simi corridor recreation.** Encourage the development of compatible open space/recreational uses of the Arroyo Simi floodway that are consistent with the provisions of the Federal Emergency Management Agency for floodway uses.
- **Policy LU-8.5 Low-impact landscapes.** Require new development projects to use low impact landscaping techniques which include drought-tolerant plant species, reduction of turf area, irrigation designed to meet plant needs, and grouping plants according to their watering needs. Help facilitate the transition of landscaping within existing residential communities to low impact landscaping types.
- **Policy LU-8.6 Sustainable streetscapes.** Consider improvements of the City's streetscapes addressing the impacts of climate change by such techniques as tree canopies to reduce heat islands and use of pervious paving, and bioswales to capture stormwater and percolate into the groundwater.
- **Policy LU-16.9 Alternative energy infrastructure.** Encourage large scale industrial development projects, as defined in the Municipal Code, to provide on-site alternative energy sources and containment of stormwater runoff.

- **Policy LU-17.8 Equitable access to infrastructure.** Support equitable access to a full complement of critical infrastructure and utilities for all residents and business.
- **Policy LU-19.5 Tree canopy.** Maintain and expand the tree canopy in the downtown area to provide shade, improve air and water quality, reduce the heat island effect, and create habitat for birds and pollinators.

Circulation Element

- **Policy CI-3.2 Landscaping.** Provide for the planting of sustainable landscaping along principal arterials to mitigate visual impacts and erosion problems, as part of new development or a City-sponsored roadway construction project.
- **Policy CI-8.1 Infrastructure maintenance.** Manage City storm drain infrastructure in an effective manner to reduce flooding and protect downstream receiving waters.
- **Policy CI-8.2 Roles and responsibilities.** Develop clear mechanisms and documentation of the roles and responsibilities of City departments, Community Facilities Districts (CFD), and private property owners on required inspection and maintenance practices for drainage and water quality facilities.
- **Policy CI-8.3 Establish fair cost sharing mechanisms for drainage improvements.** Manage flood control management and CIP projects to minimize impacts to City drainage features and establish fair and practical cost sharing mechanisms.
- **Policy CI-8.4 Green streets and BMP.** Consider additional development/redevelopment requirements for City right-of-way Best Management Practice (BMP) improvements and promote green streets approaches.
- **Policy CI-8.5 Harvest and reuse systems.** Incentivize new development/redevelopment projects to implement stormwater harvest and reuse systems in addition to adopted standards.
- **Policy CI-8.6 Funding mechanisms for smarter watershed management.** Promote regional multi-benefit stormwater projects, consistent with regional watershed management programs, and determine feasibility of implementing stormwater credit program/in lieu fees for new development/redevelopment projects.
- **Policy CI-9.1 Management database and new technology methods.** Implement smart strategies to track and maintain all stormwater assets to ultimately improve watershed health.
- **Policy CI-11.3 OneWater approach.** Implement OneWater approach where potable water, grey water, recycled water, and stormwater are all viewed as integral components to integrated water management alongside natural flows and watersheds within the City.
- **Policy CI-11.4 On-site greywater and stormwater standards.** Adopt new statewide standards for on-site greywater and stormwater systems, or develop City standards to streamline the permitting of these

systems by following the Building and Safety Division, Building Code, and other applicable regulatory agencies and associated guidance documents.

Open Space, Parks and Recreation Element

- **Policy CI-1.9 Flood control areas.** Limit the use of areas designated for flood control purposes to passive recreation activities (e.g., hiking, fishing, bike riding), consistent with requirements to maintain the integrity of these areas to protect public safety.
- **Policy CI-6.1 Limitations on development.** Maintain open space lands for health and safety by limiting development in areas susceptible to flood, seismic risk, geologic instability, and wildfire, as detailed in the Safety Element.

Conservation Element

- **Policy COS-1.9 Clean water supply.** Conserve and protect water quality supplies through cooperative efforts with the Ventura County Water Conservation Plan and any future regional water quality and water supply plans and programs that may be instrumental in reducing water quality-related problems.
- **Policy COS-1.10 Water quality education.** Effectively communicate water quality education to residents and businesses. Establish or expand programs to educate community members about, and subsidize resources for reducing water use.
- **Policy COS-1.11 Water quality protection.** Require that development does not degrade natural water bodies such as streams, wetlands, and the Arroyo Simi.
- **Policy COS-1.12 Riparian preservation.** Require that new development preserve natural watercourses and riparian habitat where they occur, either by avoidance or through ecologically-sensitive design, like clustering buildings, restoring riparian habitat, and purchasing development rights or easements.
- **Policy COS-1.13 Green stormwater management.** Encourage stormwater management and drainage system improvements that minimize the need for structural modifications to watercourses and that restore creeks in culverts or hardened channels to their natural states.
- **Policy COS-1.14 Stormwater Quality Management Program.** Continue to participate in the Ventura Countywide Stormwater Quality Management Program.
- **Policy COS-1.15 Drinking water quality.** Work with the Ventura County Waterworks District No. 1 to ensure that drinking water supplied to residences in all neighborhoods, schools, and businesses is healthful and complies with all public health, safety, and quality regulations.
- **Policy COS-5.2 Water reuse.** Encourage property owners to install rainwater catchment and greywater systems in new developments or major retrofits.

- **Policy COS-5.3 Green infrastructure.** Install permeable paving, bioswales, and other green infrastructure components in new and significantly renovated hardscape projects.
- **Policy COS-7.4 Pesticide reduction.** Work with agricultural operations and property owners in and around the city to reduce pesticide use and other potentially harmful agents on agricultural land and private landscaping to the extent viable alternatives are available and economically feasible.

Safety Element

- **Policy SE-1.14 Resilient critical and lifeline facility siting.** Locate new critical and lifeline facilities outside of flood and dam inundation zones, very high fire hazard severity zones, and landslide susceptibility areas, when feasible. If not feasible, appropriately site, design, and construct new critical facilities to be resilient to flooding, fires, and landslides.
- **Policy SE-3.1 National Flood Insurance Program.** Continue to participate in the Federal Emergency Management Agency's National Flood Insurance Program to ensure building owners in Moorpark can obtain flood insurance.
- **Policy SE-3.2 Low impact development.** Minimize impervious areas by requiring development to include low impact development and green infrastructure that increase pervious surfaces to absorb impacts from stormwater and flooding.
- **Policy SE-3.3 Floodway management.** Consider floodway management design that includes areas where stream courses are left natural or as developed open space.
- **Policy SE-3.4 Flood control infrastructure.** Coordinate with the Ventura County Public Works Agency to improve and maintain flood control structures, detention basins, channel reconstruction, and diversion systems within Moorpark and the greater Calleguas Creek watershed, using natural infrastructure where feasible.
- **Policy SE-3.5 Critical and lifeline facilities.** Maintain the structural and operational integrity of critical and lifeline facilities during and after flooding events.
- **Policy SE-3.6 Floodplain management requirements.** Require new development in the 100-year and/or 500-year flood hazard zones to comply with provision of Moorpark Municipal Code Section 15.24, Floodplain Management.
- **Policy SE-3.7 Review of new flood control facilities.** Coordinate with the Ventura County Public Works Agency to review new development for flood control and flood hazard reduction from new development.
- **Policy SE-3.8 Flood safety plans.** Require new development within a designated floodplain to submit, flood safety plan for approval by the Floodplain Administrator.

- **Policy SE-3.9 Green infrastructure.** Promote the use of green infrastructure to convey stormwater and reduce flooding.
- **Policy SE-5.8 Nature-based solutions.** Where feasible, encourage the use of existing natural features and ecosystem processes, or the restoration thereof, when considering alternatives for the conservation, preservation, or sustainable management of open space. This may include, but is not limited to, aquatic or terrestrial vegetated open space, systems and practices that use or mimic natural processes, and other engineered systems, to provide clean water, conserve ecosystem values and functions, and provide a wide array of benefits to people and wildlife.

5.10.5 Level of Significance Before Mitigation

Upon implementation of regulatory requirements and standard conditions of approval Impacts 5.10-1 through 5.10-5 would be less than significant.

5.10.6 Mitigation Measures

No mitigation required.

5.10.7 Level of Significance After Mitigation

Impacts 5.10-1 through 5.10-5 would be less than significant.

5.10.8 References

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5.11 LAND USE AND PLANNING

This section of the Draft Environmental Impact Report (DEIR) evaluates the potential impacts to land use in the City of Moorpark from implementation of the proposed Moorpark General Plan 2050. This section is based on the land use plan, described in Chapter 3, *Project Description*, and shown in Figure 3.5, *Proposed Land Use Plan*. The proposed goals and policies have been evaluated to determine their consistency with other relevant sections of the General Plan. The proposed project is evaluated for compatibility with the existing land uses in the surrounding area and consistency with the Southern California Association of Governments' (SCAG) Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS). Moorpark is not within an Airport Influence Area.

Land use impacts can be either direct or indirect. Direct impacts are those that result in land use incompatibilities, division of neighborhoods or communities, or interference with other land use plans. This section focuses on direct land use impacts. Indirect impacts are secondary effects resulting from land use policy implementation, such as an increase in demand for public utilities or services, or increased traffic on roadways. Indirect impacts are addressed in other sections of this DEIR.

5.11.1 Environmental Setting

5.11.1.1 REGULATORY BACKGROUND

State Regulations

State Planning Law and California Complete Streets Act

State Planning Law (California Government Code Section 65300) requires every city in California to adopt a comprehensive, long-term general plan for physical development of the city. A general plan should consist of an integrated and internally consistent set of goals and policies that are grouped by topic into a set of elements and are guided by a citywide vision. State law requires that a general plan address eight required elements (Land Use, Circulation, Housing, Conservation, Open Space, Noise, Safety, and Environmental Justice), but allows some discretion on the arrangement and content. Additionally, each of the specific and applicable requirements in the state planning law should be examined to determine if there are environmental issues within the community that the general plan should address, including, but not limited to, hazards and flooding.

Additionally, on September 30, 2008, Assembly Bill (AB 1358), the California Complete Streets Act, was signed into law, becoming effective January 1, 2011. AB 1358 places the planning, designing, and building of complete streets into the larger planning framework of the general plan by requiring jurisdictions to amend their circulation elements to plan for multimodal transportation networks.

Regional Regulations

Southern California Association of Governments

SCAG is a council of governments representing Imperial, Los Angeles, Orange, Riverside, San Bernardino, and Ventura counties. SCAG is the federally recognized metropolitan planning organization for this region, which encompasses over 38,000 square miles. SCAG is a regional planning agency and a forum for addressing regional issues concerning transportation, the economy, community development, and the environment. SCAG is also the regional clearinghouse for projects requiring environmental documentation under federal and state law. In this role, SCAG reviews proposed development and infrastructure projects to analyze their impacts on regional planning programs. As the metropolitan planning organization for the southern California region, SCAG cooperates with the South Coast Air Quality Management District, the California Department of Transportation (Caltrans), and other agencies in preparing regional planning documents. SCAG has developed regional plans to achieve specific regional objectives. The plans most applicable to the proposed project are discussed below.

Regional Transportation Plan/Sustainable Communities Strategy

On September 3, 2020, SCAG adopted the 2020–2045 RTP/SCS (Connect SoCal), a long-range visioning plan that balances future mobility and housing needs with economic, environmental, and public health goals (SCAG 2020). Connect SoCal includes a strong commitment to reduce emissions from transportation sources to comply with Senate Bill 375, improve public health, and meet the National Ambient Air Quality Standards. This long-range plan, required by the state of California and the federal government, is updated by SCAG every four years as demographic, economic, and policy circumstances change. Connect SoCal is a living document that is rooted in strong analysis and evolves as the region's demographics, economy, and priorities change. The City of Moorpark is within the Ventura Council of Governments subregion of SCAG.

Local Regulations

City of Moorpark Zoning Ordinance

Title 17 of the City of Moorpark Municipal Code contains the zoning ordinance, which was adopted to protect and promote the public health, safety, and general welfare; to provide the environmental, economic, and social advantages that result from an orderly, planned use of resources; to establish the most beneficial and convenient relationships among land uses; and to implement the City's General Plan (Moorpark 2022). Chapter 17.12, Establishment of Zones, Boundaries, and Maps, establishes zoning designations, and Chapter 17.20, Uses by Zone, provides a comprehensive list of uses that would be allowed through the issuance of a zoning clearance and through discretionary permit approval. Chapter 17.24, Development Requirements, sets forth development requirements in each zone to provide adequate separation for light, air, safety, and open space as well as to provide an aesthetically pleasing environment in which to live, work, and recreate.

5.11.1.2 EXISTING CONDITIONS

The City of Moorpark is in eastern Ventura County in the Transverse Ranges of Southern California, as shown in Figure 3-1*, Regional Context*, and Figure 3-2, *Citywide Aerial,* in Chapter 3, *Project Description*. It is

generally bounded by the City of Simi Valley to the east, the Tierra Rejada Valley and City of Thousand Oaks to the south, and unincorporated lands in Ventura County to the west and north. The City of Moorpark encompasses 7,992 acres.

The City of Moorpark is characterized as a low intensity suburban community containing a mix of residential neighborhoods, commercial corridors and centers, industrial districts, civic and educational facilities, parklands, and open spaces. Table 3-1, *Existing Land Use Summary,* and Figure 3-3, *Existing Land Use*, in Chapter 3 show the number of housing units, households, population, nonresidential square footage, and jobs and the distribution of existing land uses in Moorpark. As of 2022, the City has four approved specific plans: Hitch Ranch Specific Plan, Carlsberg Specific Plan, Moorpark Highlands Specific Plan II, and Downtown Specific Plan.

5.11.2 Thresholds of Significance

According to Appendix G of the CEQA Guidelines, a project would normally have a significant effect on the environment if the project would:

LU-1 Physically divide an established community.

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.

5.11.3 Environmental Impacts

5.11.3.1 IMPACT ANALYSIS

The applicable thresholds are identified in brackets after the impact statement.

Impact 5.11-1: Project implementation would not divide an established community. [Threshold LU-1]

The proposed Moorpark General Plan 2050 would improve connectivity and compatibility of potential future projects with existing uses, planned uses, and the natural environment.

The Land Use Element of the proposed Moorpark General Plan 2050 provides policies designed to ensure that communities will not be divided as a result of the construction of new or modified roadways. The Land Use Plan would determine where growth would occur and the amount of allowable growth in Moorpark. Policies LU-1.4 and LU-1.5 of the Land Use Element require the City to coordinate new development and redevelopment to ensure that it is orderly with respect to location and density, that the capacity of public facilities and services is not adversely impacted, and that it is compatible with the overall community character. Policy LU-1.6 requires prioritization of infill and redevelopment of existing developed areas to achieve a seamless and connected development pattern, limiting expanded development outward into hillsides and natural areas. Policy LU-4.2 reinforces existing patterns of development by concentrating development in key centers and districts.

The Circulation Element of the Moorpark General Plan 2050 also includes policies ensuring the connectivity of transportation routes to prevent the division of established communities. Policy CI-1.2 of the Circulation Element requires the City to design, plan, maintain, and operate streets using complete streets principles for all types of transportation projects and encourages street connectivity that aims to create a comprehensive, integrated, connected network for all modes. Policy CI-1.4 promotes the continues improvement of the circulation system through improvement of roadways, sidewalk crossings, and intersection, and construction of missing links and related facilities. Policy CI-4.2 directs the City to work with public transit providers to ensure transit stations and stops are connected with pedestrian, bicycle, and micromobility networks to maximize access. Policy CI-5.2 requires proposed developments to include bikeways in their street improvements plans, consistent with the Bikeway Network Plan, and construct pertinent improvements.

The Moorpark General Plan 2050 would not physically divide any of these communities; rather, the proposed project seeks to maintain and preserve the quality of Moorpark's existing communities.

Level of Significance Before Mitigation: Less than significant.

Impact 5.11-2: Project Implementation would not conflict with applicable plans adopted for the purpose of avoiding or mitigating an environmental effect. [Threshold LU-2]

The proposed Moorpark General Plan 2050 is intended to shape development within the city until 2050. The following is an analysis of the proposed project's consistency with the applicable state, regional, and local laws, regulations, plans, and guidelines that were adopted for the purpose of avoiding or mitigating an environmental impact.

State Planning Law and California Complete Streets Act Consistency

The Moorpark General Plan 2050 has been prepared in accordance with state planning law, as provided in California Government Code Section 65300. The Moorpark General Plan 2050 is meant to be a framework for guiding planning and development and is comprehensive both in its geography and subject matter. It addresses the entire territory within the city's boundary and also addresses the full spectrum of issues associated with management of the city.

The Moorpark General Plan 2050 is consistent with California Code Section 65302 because it addresses the eight elements (Land Use, Circulation, Housing, Conservation, Open Space, Noise, Safety, and Environmental Justice) listed under this code, as well as the required elements outlined in the Governor's Office of Planning and Research general plan guidelines. The Moorpark General Plan 2050 reorganizes the current General Plan into eight elements: Circulation; Conservation; Economic Development; Housing; Land Use; Noise; Open Space, Parks, and Recreation; and Safety.

The Moorpark General Plan 2050 also includes forecasts of long-term conditions; development goals and policies; exhibits and diagrams; and objectives, principles, standards, and plan proposals throughout the various elements. The proposed land use plan and the goals and policies in the Moorpark General Plan 2050 strive to ensure preservation and land use compatibility throughout the city. Additionally, the Moorpark General Plan 2050 is consistent with AB 1358, the California Complete Streets Act of 2008, because

Complete Streets in one of the key components in the proposed Circulation Element of the Moorpark General Plan 2050. Policy CI-1.2 requires the use of complete streets principles for all types of transportation projects, including design, planning, construction, maintenance, and operations of new and existing streets and facilities. Policy CI-1.2 also encourages street connectivity that aims to create a comprehensive, integrated, and connected networks for all modes.

Refer to Section 5.17, *Transportation*, for a detailed discussion of the proposed project's consistency with alternative modes of transportation. The proposed project's consistency with state planning law and the California Complete Streets Act is provided in the analysis for Impacts 5.17-1 and 5.17-2, and the City's mobility and circulation plan (as shown in Figures 5.17-1, *Moorpark Roadway Network*, 5.17-2, *Moorpark Bicycle Network*, and 5.17-3, *Transit System*, and identified in Section 5.17) provides for safe mobility for all users—bicyclists, pedestrians, transit riders, and motorists—appropriate to the function and context of each roadway.

Moreover, each of the specific applicable requirements in state planning law (California Government Code Section 65300) have been examined to determine if there are environmental issues within the community that the Moorpark General Plan 2050 should address, including hazards and flooding. Such environmental issues (air quality, hazards, flooding, traffic, etc.) are addressed in their respective elements of the Moorpark General Plan 2050 and topical sections of Chapter 5, *Environmental Analysis*, of this DEIR.

SCAG Connect SoCal Consistency

The Moorpark General Plan 2050 is considered a project of regionwide significance pursuant to the criteria in SCAG's Intergovernmental Review Procedures Handbook (November 1995) and Section 15206 of the CEQA Guidelines. Therefore, this section addresses the proposed project's consistency with the applicable SCAG regional planning guidelines and policies. The proposed project's consistency with the applicable Connect SoCal goals are shown in Table 5.11-1, *Consistency with SCAG's Connect SoCal*.

Table 5.11-1 Consistency with SCAG's Connect SoCal

SCAG Connect SoCal Goal	Consistent Moorpark General Plan 2050 Policies
Goal #1: Encourage regional economic prosperity and global competitiveness	***Consistent:*** The Moorpark General Plan 2050 is not a regional document, but the Economic Development Element includes goals and policies related to improving Moorpark's economy. • Policies ED-1.1 through ED-1.9 of the Economic Development Element promote a self-sustaining, innovative, and resilient local economy that provides goods and services desired by local residents, attracts regional consumer spending, and contributes to Moorpark's premier quality of life. • Policies ED-2.1 through ED-2.4 of the Economic Development Element direct the City to develop a long-term program that sustains long-term economic growth and attracts private investment. • Policies ED-3.1 and ED-3.2 of the Economic Development Element encourage thriving retail, office, and industrial businesses that foster local economic prosperity. • Policies ED-4.1 through ED-4.2 of the Economic Development Element maintain fiscally sustainable land use and development patterns and well-managed municipal finances, resulting in a fiscally resilient local government that invests in public amenities and services.

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LAND USE AND PLANNING

Table 5.11-1 Consistency with SCAG's Connect SoCal

SCAG Connect SoCal Goal	Consistent Moorpark General Plan 2050 Policies
Goal #2: Improve mobility, accessibility, reliability, and travel safety for people and goods	***Consistent:*** The Circulation Element of the Moorpark General Plan 2050 contains policies that provide guidance on improving connectivity for people and goods. • Policies CI-1.1 through CI-1.9 of the Circulation Element promote a transportation system supporting uses accommodated by the Land Use Plan and providing for the safe and efficient movement of all ages and abilities, goods, and services into, out of, and through Moorpark. • Policies CI-2.1 through CI-2.11 of the Circulation Element work toward a circulation system which supports existing, approved, and planned uses throughout the city while maintaining a desired level of service on all streets and intersections. • Policies CI-4.1 through CI-4.5 of the Circulation Element encourage public transportation improvements and support to serve Moorpark. • Policies CI-5.1 through CI-5.9 of the Circulation Element promote a citywide system of safe, efficient, and attractive bicycle and pedestrian routes for commuter, school, and recreational use.
Goal #3: Enhance the preservation, security, and resilience of the regional transportation system	***Consistent***: The Moorpark General Plan 2050 is not a regional document, but the Circulation Element would encourage regional coordination of transportation issues, as well as provide guidance and policies that help preserve the regional transportation system. Policies from the Conservation Element also ensure a sustainable transportation system. • Policies CI-1.7 and CI-1.8 of the Circulation Element encourage collaboration with regional partners and Caltrans to achieve consistency between regional and local transportation improvements and the City's General Plan, and accomplish the city's future transportation goals. • Policies CI-2.1 through CI-2.11 of the Circulation Element work toward a circulation system that supports existing, approved, and planned uses throughout the city while maintaining a desired level of service on all streets and intersections. • Policies CI-4.1 through CI-4.5 of the Circulation Element encourage public transportation improvements and support to serve Moorpark. • Policies COS-1.4 and COS-1.5 of the Conservation Element promote the use of low-emission transportation and fleet.
Goal #4: Increase person and goods movement and travel choices within the transportation system	***Consistent:*** The Circulation Element of the Moorpark General Plan 2050 contains policies that provide guidance on improving connectivity for people and goods. • Policies CI-1.1 through CI-1.9 of the Circulation Element promote a transportation system supporting uses accommodated by the Land Use Plan and providing for the safe and efficient movement of all ages and abilities, goods, and services into, out of, and through Moorpark. • Policies CI-2.1 through CI-2.11 of the Circulation Element work toward a circulation system which supports existing, approved, and planned uses throughout the city while maintaining a desired level of service on all streets and intersections. • Policies CI-4.1 through CI-4.5 of the Circulation Element encourage public transportation improvements and support to serve Moorpark. • Policies CI-5.1 through CI-5.9 of the Circulation Element promote a citywide system of safe, efficient, and attractive bicycle and pedestrian routes for commuter, school, and recreational use.
Goal #5: Reduce greenhouse gas emissions and improve air quality	***Consistent:*** Implementation of the Moorpark General Plan 2050 would introduce policies and actions that address the importance of protecting the health of residents and the environment by reducing greenhouse gas emissions and improving air quality. The proposed project would encourage active transportation, such as bicycling and walking, through policies throughout the General Plan Elements. • Policy CI-2.2 of the Circulation Element requires the City to periodically review and adjust the environmental impact threshold as appropriate in consideration of actual vehicle miles and greenhouse gas emissions resulting from implementation of the proposed Land Use Plan. • Policies CI-4.1 through CI-4.4 of the Circulation Element encourage public transportation improvements and support to serve Moorpark. • Policies CI-5.1 through CI-5.9 of the Circulation Element promote a citywide system of safe, efficient, and attractive bicycle and pedestrian routes for commuter, school, and recreational use.

Table 5.11-1 Consistency with SCAG's Connect SoCal

SCAG Connect SoCal Goal	Consistent Moorpark General Plan 2050 Policies
	• Policies CI-6.1 through CI-6.4 of the Circulation Element direct the City to utilize transportation demand management to assist reduction of vehicle trips, trip lengths, air quality impacts, and greenhouse gas emissions. • Policies COS-1.1 through COS-1.8 of the Conservation Element provide for the improvement of air quality though coordination with the community and other governmental agencies, promotion of infill development and development siting that would reduce vehicle trips and air emissions, implementation of low-emission transportation and fleet, and education of air quality standards, health effects, and efforts to improve air quality and reduce greenhouse gas emissions. • Policy COS-8.1 of the Conservation Element directs the City to reduce community-wide and city operations greenhouse gas emissions to meet or exceed the State's goal to achieve carbon neutrality by 2045. • Policies LU-4.1 through LU-4.6 and Policy LU-4.8 of the Land Use Element encourage a city of compact and walkable centers and corridors to reduce automobile dependence and greenhouse gas emissions. • Policies LU-8.1, LU-8.3, and LU-8.7 of the Land Use Element encourage land use development practices that reduces greenhouse gas emissions. • Policies LU-9.1, LU-9.2, and LU-11.3 of the Land Use Element promote pedestrian-oriented circulation and neighborhoods.
Goal #6: Support healthy and equitable communities	***Consistent:*** The Moorpark General Plan 2050 includes many policies throughout the General Plan Elements to support the health of its residents and ensure equitable access to resources. • Policy COS-7.7 of the Conservation Element supports the accessibility and availability of healthy food. • Policies SE-6.1 through SE-6.5 of the Safety Element work towards a community prepared for human health hazard events. • Policies HE-5.1 through HE-5.5 of the Housing Element further equity in the provision, type, and affordability of housing and the availability of services for all Moorpark residents. • Policies LU-9.1 through LU-9.11 of the Land Use Element promote land use development practices that contribute to healthy lives for Moorpark's residents. • Policies LU-10.1 through LU-10.8 of the Land Use Element require fair and equitable access for all residents to employment, housing, parks, education, recreation, transportation, retail, and public services. • Policy LU-17.8 of the Land Use Element supports equitable access to a full complement of critical infrastructure and utilities for all residents and business. • Policies OSPR-2.1 through OSPR-2.14 of the Open Space, Parks, and Recreation Element encourage recreation programs serving all residents that contribute to their enjoyment and physical and mental health. • Policy OSPR-6.1 of the Open Space, Parks, and Recreation Element places limitations on development to maintain open space lands that contribute to the health and safety of Moorpark residents.
Goal #7: Adapt to a changing climate and support an integrated regional development pattern and transportation network	***Consistent:*** The Moorpark General Plan 2050 is not a regional document but includes policies that support a sustainable and integrated development pattern and transportation network throughout the General Plan Elements. • Policy CI-1.2 of the Circulation Element encourages street connectivity that aims to create a comprehensive, integrated, connected network for all modes. • Policies CI-1.7 through CI-1.9 of the Circulation Element direct the City to collaborate with regional partners, Caltrans, and California Highway Patrol to achieve consistency between regional and local transportation improvements and the City's General Plan, and accomplish the city's future transportation goals. • Policies CI-2.1 through CI-2.11 of the Circulation Element work toward a circulation system that supports existing, approved, and planned uses throughout the city while maintaining a desired level

Table 5.11-1 Consistency with SCAG's Connect SoCal

SCAG Connect SoCal Goal	Consistent Moorpark General Plan 2050 Policies
	of service on all streets and intersections. • Policy CI-4.2 of the Circulation Element directs the City to work with public transit providers to ensure integration with mobility networks. • Policies COS-1.4 and COS-1.5 of the Conservation Element promote the use of low-emission transportation and fleet. • Policies LU-8.1 through LU-8.9 of the Land Use Element require land use development practices that are resilient to climate change.
Goal #8: Leverage new transportation technologies and data-driven solutions that result in more efficient travel	***Consistent:*** The Circulation Element of the Moorpark General Plan 2050 includes policies that encourage the use of new technologies and data-driven solutions that would result in more efficient travel. • Policy CI-2.7 of the Circulation Element promotes evaluation of opportunities to incorporate new materials, technologies, or design features that improve safety and operations of the circulation system. • Policy CI-2.10 of the Circulation Element requires updates to roadway and operational standards to account for emerging mobility trends. • Policy CI-4.5 of the Circulation Element encourages the use of new and emerging technologies through pilot programs.
Goal #9: Encourage development of diverse housing types in areas that are supported by multiple transportation options	***Consistent:*** General Plan Elements of the proposed Moorpark General Plan 2050 include policies that encourage development of diverse housing as well as improved transportation options. • Policies CI-4.1 through CI-4.4 of the Circulation Element encourage public transportation improvements and support to serve the City of Moorpark. • Policies CI-5.1 through CI-5.9 of the Circulation Element promote a citywide system of safe, efficient, and attractive bicycle and pedestrian routes for commuter, school, and recreational use. • Policies LU-3.1 through LU-3.3 of the Land Use Element provide for the development of a diversity of residential density, types, lot sizes, and design. • Policy LU-3.7 of the Land Use Element promotes opportunities to develop uses that can economically benefit from their proximity to the Moorpark Metrolink Station. • Policies LU-4.3 and LU-4.4 of the Land Use Element encourage a development pattern of residential neighborhoods and multiple-family dwellings in close proximity to transit lines. • Policy LU-9.2 of the Land Use Element directs the location and design of new development to foster active pedestrian access and pedestrian walkways and connections to adjoining residential neighborhoods. • Policy LU-11.3 of the Land Use Element requires the City to maintain sidewalks, parkways street tree canopies, and landscaping throughout the residential neighborhoods to promote walking as an enjoyable and healthy activity and alternative to automobile use.
Goal #10: Promote conservation of natural and agricultural lands and restoration of habitats	***Consistent:*** The Moorpark General Plan 2050 includes policies in the Open Space, Parks, and Recreation and Conservation Elements that serve to protect natural and agricultural lands, as well as biological resources and their habitats. • Policies COS-1.16 through 1.20 of the Conservation Element protect biological resources. • Policies COS-7.3, COS-7.4, and COS-7.6 of the Conservation Element encourage sustainable and low-carbon agriculture activities. • Policies OSPR-4.1 through OSPR-4.5 of the Open Space Parks, and Recreation Element protect scenic topographic features and elements. • Policies OSPR-5.1 through OSPR-5.3 of the Open Space, Parks, and Recreation Element promote opportunities for productive agricultural lands within Moorpark.

Source: SCAG 2020

As summarized above, implementation of the proposed Moorpark General Plan 2050 would not result in significant land use impacts related to the State Planning Law, the California Complete Streets Act, and SCAG's Connect SoCal.

Level of Significance Before Mitigation: Less than significant.

5.11.4 Relevant General Plan Policies

Circulation Element

- **Policy CI-1.1 Multimodal transportation.** Require that the planning, design, and construction of all transportation projects consider the needs for all modes of travel to create safe, livable, and inviting environments for motorists, pedestrians, bicyclists, and public transit users of all ages and abilities.

- **Policy CI-1.2 Complete streets.** Design, plan, maintain, and operate streets using complete streets1 principles for all types of transportation projects including design, planning, construction, maintenance, and operations of new and existing streets and facilities. Encourage street connectivity that aims to create a comprehensive, integrated, connected network for all modes.

- **Policy CI-1.3 User safety.** Enhance the safety of all users of the transportation system.

- **Policy CI-1.4: System improvements.** Promote the continued improvement of the circulation system, through the improvement of sub-standard roadways, sidewalk crossings, and intersections and the construction of missing links and related facilities through the City's Capital Improvement Program (CIP).

- **Policy CI-1.5 Rail improvements.** Encourage the improvement and modification of rail transportation facilities to promote ridership and safety and minimize impacts on local circulation.

- **Policy CI-1.6 Rural areas.** Design roadways, pedestrian areas, walks, and other elements of mobility infrastructure in applicable outlying areas to convey a rural appearance while providing for low maintenance costs and safe passage of vehicles, pedestrians, equestrians, and bicycles.

- **Policy CI-1.7 Collaborate with Regional Partners.** Engage with Ventura County and the Ventura County Transportation Commission to achieve consistency between regional and local transportation improvements and the City's General Plan, and accomplish the City's future transportation goals.

- **Policy CI-1.8 Collaborate with Caltrans.** Engage with Caltrans to achieve consistency between regional and local transportation improvements and the City's General Plan and accomplish the City's future transportation goals.

- **Policy CI-2.4 VMT reduction.** Work to reduce VMT through land use planning, enhanced transit access, localized attractions that reduce the need for travel to adjoining communities, and improved access to non-vehicular modes of transportation.

- **Policy CI-4.1 Moorpark Transit.** Support Moorpark Transit and other transit operators in the City.
- **Policy CI-4.2 Integration with mobility networks.** Work with public transit providers to ensure transit stations and stops are connected with pedestrian, bicycle, and micromobility networks to maximize access.
- **Policy CI-4.3 Transit facilities.** Incorporate improvements supporting public transit use in new development and public spaces such as bus benches, shelters, tree canopy, pads and/or turn-outs.
- **Policy CI-4.4 Enhance access.** Implement improvements and programs enhancing the access to and use of public transit by students, senior citizens and those with limited mobility.
- **Policy CI-4.5 Pilot projects.** Encourage the use of new and emerging technologies through pilot programs.
- **Policy CI-5.1 New bicycle and pedestrian facilities.** Prioritize plans for new bicycle and pedestrian facilities to provide continuity and close gaps in the bikeway and sidewalk network.
- **Policy CI-5.2 Improvements to bikeway network.** Require proposed residential, commercial, and industrial developments to include bikeways in their street improvement plans, consistent with the Circulation Element Bikeway Network Plan (Figure 6) and construct pertinent improvements.
- **Policy CI-5.3 Funding for bikeways.** Require development projects to incorporate or participate in the funding of planned bikeways that allow the community to utilize bicycles as an alternative to automobiles.
- **Policy CI-5.4 Off-street bicycle paths.** Encourage the provision and maintenance of off-street bicycle paths.
- **Policy CI-5.5 Bicycle parking and storage.** Encourage the provision of bicycle parking and storage facilities at new or modified public, commercial, and industrial building sites.
- **Policy CI-5.6 Sidewalks and landscape buffers.** Require the development of sidewalks and incorporation of sustainable landscaping between the curb and sidewalk for new projects proposed in commercial and industrial areas along arterial and collector roadways. Provide landscaped buffers where feasible to separate pedestrian environments from the travel way adjacent to motor vehicles.
- **Policy CI-5.7 Pedestrian safety.** Require sidewalks to be designed for observation from vehicles and bicycles to ensure safety of pedestrians and follow accepted traffic engineering practice, when included as part of roadway improvement plans. Provide convenient and high-visibility crossings for pedestrians.
- **Policy CI-5.8 Buffers and protected lanes.** Recognize that high-speed streets, high-volume streets, and truck routes can increase pedestrian and bicycle stress levels and decrease comfortability. To mitigate impacts, provide increased buffers and protected bicycle lanes in high-stress areas, where feasible.

- **Policy CI-5.9 Partnerships with schools.** Develop partnerships with local schools to identify and implement mobility improvements and non-infrastructure programs that improve safety for students traveling to/from school and increase the number of students walking and bicycling to school.

- **Policy CI-6.1 Employer incentives.** Encourage businesses to provide incentives for employees to utilize alternatives to the conventional automobile transportation to reduce energy consumption, noise pollution, air pollution, and greenhouse gas emissions, such as shared ride programs, parking cash out, transit benefits, and allowing telecommuting and alternative work schedules.

- **Policy CI-6.2 Routing, scheduling, and planning priority.** Support the provision of alternative forms of public and private transit that offer routing, scheduling, and planning priority to the work force, youth, students, handicapped, senior citizens, and shoppers to the extent feasible.

- **Policy CI-6.3 Ventura County Air Pollution Control District.** Support the Ventura County Air Pollution Control District in its effort to implement transportation demand management strategies.

- **Policy CI-6.4 TDM fund expenditure.** The City shall develop a program for expending transportation demand management funds collected as mitigation for developments' air quality impacts.

Conservation Element

- **Policy COS-1.1 Air quality coordination.** Cooperate and participate with Ventura County Air Pollution Control District, Southern California Association of Governments, and the California Air Resources Board, in regional air quality management plans, programs, enforcement measures, and mitigation measures designed to reduce and/or minimize the amount of primary and secondary air pollutants.

- **Policy COS-1.2 Infill development.** Promote infill development to facilitate walking and use of alternative transportation modes and reduce vehicle trips and air emissions.

- **Policy COS-1.3 Development siting.** Require that development be located and designed to reduce the number of vehicle trips generated and air emissions.

- **Policy COS-1.16 Ecologically Significant Resource Areas.** Maintain, restore, and enhance ecologically significant resource areas in their natural state to the greatest extent possible. Limit development in these areas to compatible low-intensity uses with adequate provisions to protect sensitive resources, including setbacks around resource areas.

- **Policy COS-1.17 Native habitat protection.** Require that native vegetation and habitat are retained where feasible to support the health of local wildlife populations.

- **Policy COS-1.18 Wildlife corridors.** Adopt land use regulations that consider, complement, and support state, regional, and county-adopted wildlife corridors, including the Ventura County Wildlife Corridor Overlay Zone and evaluate the appropriateness of designating additional corridors.

- **Policy COS-8.1 Greenhouse gas reduction.** Reduce community-wide and City operations greenhouse gas (GHG) emissions from vehicles, residential, and nonresidential energy use, waste generation, water and wastewater collection and treatment, off-road uses, and other GHG emission sources to meet or exceed the State's goal to achieve carbon neutrality by 2045.

Economic Development Element

- **Policy ED-1.4 Local workforce.** Increase the number of residents working in the city, by prioritizing economic development activities that create employment opportunities suited to the skills and education of current and future residents.

- **Policy ED-1.5 Workforce housing.** Support an adequate and reliable workforce for local businesses, by promoting the development of housing opportunities suited to the range of incomes in accordance with the Land Use Element and the Housing Element.

- **Policy ED-1.9 Metrolink and transit.** Collaborate with transit service providers to improve awareness of and access to transit services for current and future residents and workers.

- **Policy ED-3.1 Office and industrial preservation.** Maintain and enhance the functionality of areas currently used for and planned for office and industrial businesses in order to promote economic resilience and growth.

Land Use Element

- **Policy LU-3.1 Housing for all residents.** Provide a mix of residential densities to accommodate the housing needs of all members of the community and address Moorpark's fair share of regional housing needs consistent with the Housing Element.

- **Policy LU-3.2 Housing types.** Provide for the development of a diversity of residential product types, lot sizes, and designs, unless determined by the City to be infeasible due to the size of the project.

- **Policy LU-3.3 Broader mix of housing types.** Facilitate the development of mid-range, or "missing middle," housing units such as duplexes, multiplexes, courtyard homes, and townhomes.

- **Policy LU-3.7 Transit-oriented development.** Promote opportunities to develop uses that can economically benefit from their proximity to the Moorpark Metrolink Station and promote increased ridership.

- **Policy LU-4.1 Sustainable urban form.** Provide an overall pattern of land uses that promotes efficient development; reduces automobile dependence, greenhouse gas emissions; and consumption of non-renewable resources; ensures compatibility among uses; enhances community livability and health; and sustains economic vitality.

- **Policy LU-4.2 Focused development.** Reinforce existing patterns of development by concentrating development in key centers and districts serving as destinations and gathering places for the community that are linked by pedestrian connections to adjoining residential neighborhoods, such as the downtown High Street corridor, Mission-Bell/Moorpark Town Center, and Moorpark Marketplace.

- **Policy LU-4.3 Residential neighborhoods.** Maintain a development pattern of distinct residential neighborhoods oriented around parks, schools, and community facilities that are connected with neighborhood-serving businesses and public transit.

- **Policy LU-4.4 Multi-family housing.** Promote the development of multiple-family dwellings in close proximity to employment opportunities, shopping areas, public parks, and transit lines, with careful consideration of the proximity to and compatibility with single-family neighborhoods.

- **Policy LU-4.5 Community-serving uses.** Encourage uses that meet the daily needs of residents such as grocery stores, local-serving restaurants, and service businesses to be located within safe walking distance of residents.

- **Policy LU-4.6 Highway-oriented development.** Cluster commercial development in compact areas along major roadways and provide pedestrian links to adjacent residential areas.

- **Policy LU-4.8 Enhanced industrial districts.** Support new industrial development adjacent to and as infill within existing industrial uses and along major transportation corridors.

- **Policy LU-8.1 Model of environmental sustainability.** Establish Moorpark as a leader of land use development practices that contribute to the sustainability and stewardship of environmental resources including air quality protection, energy and water efficiency, natural resource conservation, greenhouse gas reduction, and climate change resiliency.

- **Policy LU-8.2 Reduction of energy and water use.** Encourage developers to exceed standards for building design and construction specified by the California Green Building Standards Code, with goals of achieving net zero energy and water use.

- **Policy LU-8.3 Design for climate change.** Require major development projects, as defined in the Municipal Code, to prepare greenhouse gas reduction and climate change resilience plans.

- **Policy LU-8.5 Low-impact landscapes.** Require new development projects to use low impact landscaping techniques which include drought-tolerant plant species, reduction of turf area, irrigation designed to meet plant needs, and grouping plants according to their watering needs. Help facilitate the transition of landscaping within existing residential communities to low impact landscaping types.

- **Policy LU-8.6 Sustainable streetscapes.** Consider improvements of the City's streetscapes addressing the impacts of climate change by such techniques as tree canopies to reduce heat islands and use of pervious paving, and bioswales to capture stormwater and percolate into the groundwater.

- **Policy LU-8.7 Habitat protection.** Encourage public and private projects to be located and designed to preserve significant habitats, vegetation, and other significant educational, scientific, and scenic resources of social value, protect air quality, and reduce greenhouse gas emissions as specified by the Conservation, Open Space and Recreation Element.

- **Policy LU-8.8 Waste reduction and recycling.** Require that commercial, industrial, and manufacturing uses implement reuse, reduction, and recycling programs consistent with applicable State regulations.

- **Policy LU-8.9 Design to avoid hazards.** Require that development in significant hazard areas is located and designed to ensure safety in accordance with the Safety Element.

- **Policy LU-9.1 Healthy buildings and places.** Promote a healthy built environment by encouraging the design and rehabilitation of buildings and sites for healthy living and working conditions, including promoting enhanced pedestrian-oriented circulation, lighting, building materials, and universal accessibility using existing tools, practices, and programs.

- **Policy LU-9.2 Active pedestrian environment.** Locate and design new development to foster active pedestrian access and use by such techniques as locating a mix of uses and buildings around common plazas and open spaces to promote outdoor gatherings and walking among businesses, inclusion of bicycle storage facilities, and pedestrian walkways and connections to adjoining residential neighborhoods.

- **Policy LU-9.3 Age-friendly living.** Encourage the development of barrier-free buildings and streets, enhanced mobility, and independence of people with disabilities and safe neighborhoods to support a life-long process of active aging by making Moorpark an "age friendly" city that strives to create a positive, socially inclusive, and supportive environment.

- **Policy LU-9.4 Active transportation.** Promote infrastructure improvements that support active transportation with safe, attractive, and comfortable facilities that meet community needs.

- **Policy LU-10.1 Access to services and amenities.** Strive to ensure that recreational, health, public service, and other desired services and neighborhood amenities are distributed equitably throughout the city.

- **Policy LU-10.2 Access to housing.** Promote an equitable distribution of housing types for all income groups and ages throughout the city and promote mixed-income developments in all areas of the City.

- **Policy LU-10.3 Employment and education match.** Encourage a balance between job type, the workforce, and housing development to reduce the negative impacts of long commutes and provide a range of employment opportunities for all city residents.

- **Policy LU-10.7 Educational partnerships.** Collaborate with local schools in areas of opportunity, including school transit, health and safety, academic performance, and educational outcomes.

- **Policy LU-10.8: Economic security.** Promote and support workforce development options for residents seeking to enhance their job skills, employment stability, and economic security by supporting collaborations with Moorpark College, high schools, adult schools, and employers.

- **Policy LU-11.3 Pedestrian-oriented neighborhoods.** Maintain sidewalks, parkways, street tree canopies, and landscaping throughout the residential neighborhoods to promote walking as an enjoyable and healthy activity and alternative to automobile use.

- **Policy LU-17.8 Equitable access to infrastructure.** Support equitable access to a full complement of critical infrastructure and utilities for all residents and business.

5.11.5 Level of Significance Before Mitigation

Upon implementation of regulatory requirements and standard conditions of approval, the following impacts would be less than significant: 5.11-1 and 5.11-2.

5.11.6 Mitigation Measures

No significant adverse impacts were identified, and no mitigation measures are necessary.

5.11.7 Level of Significance After Mitigation

No mitigation measures are required, and impacts would be less than significant.

5.11.8 References

Moorpark, City of. 2022. Moorpark, California Municipal Code, Title 17, Zoning. Accessed September 6, 2022. https://library.qcode.us/lib/moorpark_ca/pub/municipal_code/item/title_17

Southern California Association of Governments (SCAG). 2020, September 3. *The 2020-2045 Regional Transportation Plan/Sustainable Communities Strategy of the Southern California Association of Governments: Connect SoCal*. https://scag.ca.gov/read-plan-adopted-final-connect-socal-2020

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5.12 MINERAL RESOURCES

Minerals are defined as any naturally occurring chemical elements or compounds, formed from inorganic processes and organic substances. Minable minerals or an "ore deposit" is defined as a deposit of ore or mineral having a value materially in excess of the cost of developing, mining, and processing the mineral and reclaiming the project area. The conservation, extraction, and processing of mineral resources are an integral part of development and economy of the City of Moorpark.

5.12.1 Environmental Setting

5.12.1.1 REGULATORY BACKGROUND

State Regulations

Surface Mining and Reclamation Act

California's Surface Mining and Reclamation Act of 1975, referred to as SMARA, was enacted to address the need for a continuing supply of mineral resources, and to prevent or minimize the negative impacts of surface mining to public health, property, and the environment. Requirements for SMARA are codified under Public Resources Code Section 2710 et seq. Under state law, all mining operations are required to obtain permits prior to commencing operations and abide by local and state operating requirements. Mining operations are also required to have appropriate reclamation plans in place, provide assurances, and abide by state and local environmental laws.

Classification

The California Geological Survey's Mineral Resources Project provides information about California's nonfuel mineral resources. The Mineral Resources Project classifies lands throughout the state that contain regionally significant mineral resources per SMARA. Nonfuel mineral resources include metals such as gold, silver, iron, and copper; industrial metals such as boron compounds, rare-earth elements, clays, limestone, gypsum, salt and dimension stone; and construction aggregate including sand, gravel, and crushed stone. Development generally results in a demand for minerals, especially construction aggregate. Urban preemption of prime deposits and conflicts between mining and other uses throughout California led to passage of SMARA, which requires all cities and counties to incorporate in their general plans the mapped designations approved by the State Mining and Geology Board.

The classification process involves the determination of Production-Consumption (P-C) Region boundaries, based on identification of active aggregate operations (Production) and the market area served (Consumption). The P-C regional boundaries are modified to include only the portions of the region that are urbanized or urbanizing and are classified for their aggregate content. An aggregate appraisal further evaluates the presence or absence of significant sand, gravel, or stone deposits that are suitable sources of aggregate. The classification of these mineral resources is a joint effort of the state and the local governments. It is based on geologic factors and requires that the State Geologist classify the mineral resources area as one of four Mineral Resource Zones (MRZ), Scientific Resource Zone (SZ), or Identified Resource Area (IRA), described below.

- **MRZ-1:** A Mineral Resource Zone where adequate information indicates that no significant mineral deposits are present or likely to be present.
- **MRZ-2:** A Mineral Resource Zone where adequate information indicates that significant mineral deposits are present, or a likelihood of their presence and development should be controlled.
- **MRZ-3:** A Mineral Resource Zone where the significance of mineral deposits cannot be determined from the available data.
- **MRZ-4:** A Mineral Resource Zone where there is insufficient data to assign any other MRZ designation.
- **SZ Areas:** Containing unique or rare occurrences of rocks, minerals, or fossils that are of outstanding scientific significance shall be classified in this zone.
- **IRA Areas:** County or State Division of Mines and Geology Identified Areas where adequate production and information indicates that significant minerals are present.

As part of the classification process, an analysis of site-specific conditions is utilized to calculate the total volume of aggregates within individually identified Resource Sectors. Resource Sectors are MRZ-2 areas identified as having regional or statewide significance. Anticipated aggregate demand in the P-C regions for the next 50 years is then estimated and compared to the total volume of aggregate reserves identified within the P-C region.

Designation

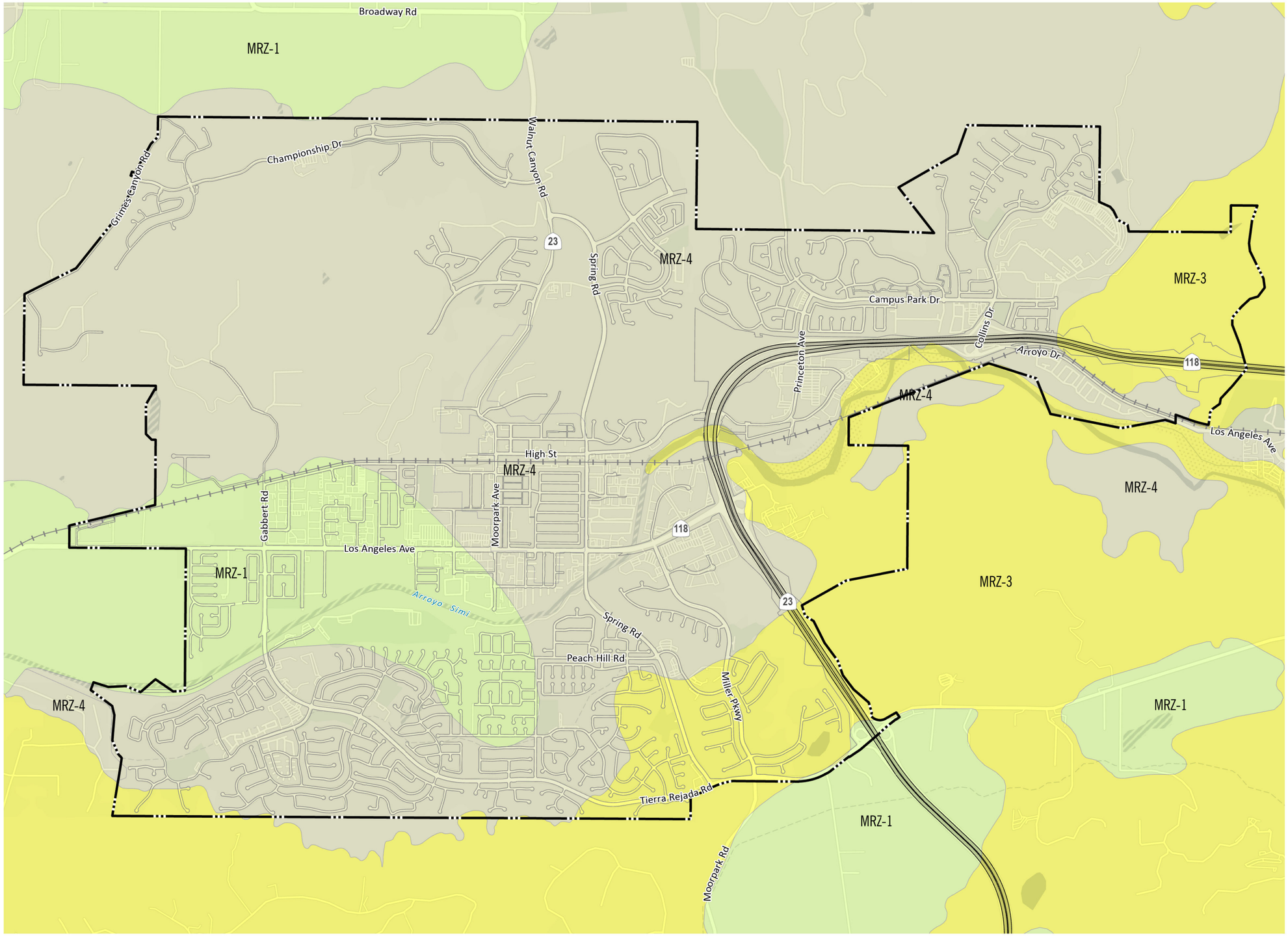
Once a classification report has been completed, the State Mining and Geology Board may choose, based on recommendations from the State Geologist, to proceed with the second step in SMARA's mineral land identification process, designation of mineral deposits that are of regional or statewide significance. In contrast to classifications, which inventory mineral deposits without regard to land use or land ownership, the purpose of a designation is to identify deposits that are potentially available from a land-use perspective and are of prime importance in meeting future needs of the region or state.

5.12.1.2 EXISTING CONDITIONS

The City of Moorpark is in the Simi Valley Production-Consumption Region. Areas with known mineral resources in Moorpark are shown on Figure 5.12-1, *Areas of Mineral Resource Significance*. As this figure shows, there are no known mineral resources of statewide significance within the Moorpark city limits.

Figure 5.12-1

Areas of Mineral Resource Significance



City Boundary

Railroad

MRZ Zones

- MRZ-1, Areas where available geologic information indicates that little likelihood exists for the presence of significant Portland cement concrete aggregate resources.
- MRZ-2, Areas where geologic information indicates the presence of significant Portland cement concrete aggregate resources.
- MRZ-3, Areas containing known or inferred Portland cement concrete aggregate resource of undetermined mineral resource significance
- MRZ-4, Areas where available information is inadequate for assignment to any other MRZ

MADE BY MOORPARK General Plan 2050

Draft Environmental Impact Report

0 1,000 2,000 4,000 FT

Source: CGS, SR-145 1981

Date: 12/12/2022

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According to the California Department of Conservation, Division of Mines and Geology's Mineral Land Classification Map for aggregate resources, the City of Moorpark includes lands mapped as MRZ-1, MRZ-3, and MRZ-4, defined as areas where adequate information indicates that no significant mineral deposits are present, areas containing mineral deposits whose significance cannot be evaluated from available data, and areas where available information is inadequate for assignment to any other MRZ zones, respectively (DOC 1981). Table 5.12-1, *Mineral Resource Zones in Moorpark*, identify the MRZ classifications by acreage in Moorpark

Table 5.12-1 Mineral Resource Zones in Moorpark

Mineral Resource Zone Classifications	City of Moorpark (Acres)
MRZ-1	953.89
MRZ-2	0
MRZ-3	1,183.24
MRZ-4	5,854.15

Source: DOC 1981

There are currently no active mines or permitted mining operations in the city (DOC 2016). However, outside of the city limits, within the city's overall area of interest, mineral extraction does occur in some of the unincorporated lands. The closest active mines are two miles north of the city boundaries.

5.12.2 Thresholds of Significance

According to Appendix G of the CEQA Guidelines, a project would normally have a significant effect on the environment if the project would:

M-1 Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state.

M-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.

5.12.3 Environmental Impacts

5.12.3.1 IMPACT ANALYSIS

The applicable thresholds are identified in brackets after the impact statement.

Impact 5.12-1: Project implementation would not result in the loss of availability of a known mineral resource. [Thresholds M-1 and M-2]

The City of Moorpark does not contain mineral resources of statewide, regional, or local significance (MRZ-2). The city is primarily underlain by MRZ-1, MRZ-3, and MRZ-4 lands (see Figure 5.12-1). These are

defined as areas where adequate information indicates that no significant mineral deposits are present or likely to be present, where the significance of mineral deposits cannot be determined from the available data, or where there is insufficient data to assign any other MRZ designation. Given that the city does not have mineral resource sectors and no active or inactive mines, implementation of the Moorpark General Plan 2050 would not cause a loss of availability of known mineral resources. Therefore, no impact would occur.

Level of Significance Before Mitigation: No impact.

5.12.4 Relevant General Plan Policies

Conservation Element

- **Policy COS-2.1 Petroleum extraction phase-out.** Require that petroleum extraction facilities currently operating within the city be phased out over time and new extraction facilities be prohibited.

5.12.5 Level of Significance Before Mitigation

Upon implementation of regulatory requirements and standard conditions of approval, the following impacts would be less than significant: 5.12-1.

5.12.6 Mitigation Measures

No significant adverse impacts were identified, and no mitigation measures are necessary.

5.12.7 Level of Significance After Mitigation

No mitigation measures are required, and impacts would be less than significant.

5.12.8 References

California Department of Conservation (DOC), Division of Mines and Geology. 1981. *Mineral Land Classification Map: Aggregate Resources Only, Moorpark Quadrangle*. Accessed September 22, 2022. https://maps.conservation.ca.gov/cgs/informationwarehouse/index.html?map=mlc.

———, Division of Mine Reclamation. 2016. Mines Online. Accessed September 22, 2022. https://maps.conservation.ca.gov/mol/index.html.

5.13 NOISE

This section of the Draft Environmental Impact Report (DEIR) evaluates the potential for implementation of the Moorpark General Plan 2050 (proposed project) to result in noise impacts in the City of Moorpark. This section discusses the fundamentals of sound; examines federal, state, and local noise guidelines, policies, and standards; reviews noise levels at existing receptor locations; evaluates potential noise and vibration impacts associated with the Moorpark General Plan 2050; and provides mitigation to reduce noise and vibration impacts at sensitive locations. Noise modeling data is included in Appendix I of this DEIR.

5.13.1 Environmental Setting

Noise and Vibration Fundamentals

Noise is defined as unwanted sound and is known to have several adverse effects on people, including hearing loss, speech and sleep interference, physiological responses, and annoyance. Although sound can be easily measured, the perception of noise and the physical response to sound complicate the analysis of its impact on people. People judge the relative magnitude of sound sensation in subjective terms such as "noisiness" or "loudness." The following are brief definitions of terminology used in this section:

Technical Terminology

- **Sound.** A disturbance created by a vibrating object, which, when transmitted by pressure waves through a medium such as air, is capable of being detected by a receiving mechanism, such as the human ear or a microphone.
- **Noise.** Sound that is loud, unpleasant, unexpected, or otherwise undesirable.
- **Decibel (dB).** A unitless measure of sound on a logarithmic scale.
- **A-Weighted Decibel (dBA).** An overall frequency-weighted sound level in decibels that approximates the frequency response of the human ear.
- **Equivalent Continuous Noise Level (L_{eq}); also called the Energy-Equivalent Noise Level.** The value of an equivalent, steady sound level which, in a stated time period (often over an hour) and at a stated location, has the same A-weighted sound energy as the time-varying sound. Thus, the Leq metric is a single numerical value that represents the equivalent amount of variable sound energy received by a receptor over the specified duration.
- **Statistical Sound Level (L_n).** The sound level that is exceeded "n" percent of time during a given sample period. For example, the L_{50} level is the statistical indicator of the time-varying noise signal that is exceeded 50 percent of the time (during each sampling period); that is, half of the sampling time, the changing noise levels are above this value and half of the time they are below it. This is called the "median sound level." The L_{10} level, likewise, is the value that is exceeded 10 percent of the time (i.e., near the maximum) and this is often known as the "intrusive sound level." The L_{90} is the sound level

exceeded 90 percent of the time and is often considered the "effective background level" or "residual noise level."

- **Day-Night Sound Level (L_{dn} or DNL).** The energy-average of the A-weighted sound levels occurring during a 24-hour period, with 10 dB added to the sound levels occurring during the period from 10:00 p.m. to 7:00 a.m.

- **Community Noise Equivalent Level (CNEL).** The energy average of the A-weighted sound levels occurring during a 24-hour period, with 5 dB added from 7:00 pm to 10:00 pm and 10 dB from 10:00 p.m. to 7:00 a.m. For general community/environmental noise, CNEL and Ldn values rarely differ by more than 1 dB (with the CNEL being only slightly more restrictive, that is, higher than the L_{dn} value). As a matter of practice, L_{dn} and CNEL values are interchangeable and are treated as equivalent in this assessment.

- **Sensitive Receptor.** Noise- and vibration-sensitive receptors include land uses where quiet environments are necessary for enjoyment and public health and safety. Residences, schools, motels and hotels, libraries, religious institutions, hospitals, and nursing homes are examples.

- **Peak Particle Velocity (PPV).** The peak rate of speed at which soil particles move (e.g., inches per second) due to ground vibration.

Sound Fundamentals

Sound is a pressure wave transmitted through the air. It is described in terms of loudness or amplitude (measured in decibels), frequency or pitch (measured in Hertz [Hz] or cycles per second), and duration (measured in seconds or minutes). The standard unit of measurement of the loudness of sound is the decibel (dB). Changes of 1 to 3 dBA are detectable under quiet, controlled conditions, and changes of less than 1 dBA are usually indiscernible. A 3 dBA change in noise levels is considered the minimum change that is detectable with human hearing in outside environments. A change of 5 dBA is readily discernable to most people in an exterior environment, and a 10 dBA change is perceived as a doubling (or halving) of the sound.

The human ear is not equally sensitive to all frequencies. Sound waves below 16 Hz are not heard at all but are more "felt" as a vibration. Similarly, though people with extremely sensitive hearing can hear sounds as high as 20,000 Hz, most people cannot hear above 15,000 Hz. In all cases, hearing acuity falls off rapidly above about 10,000 Hz and below about 200 Hz. Since the human ear is not equally sensitive to sound at all frequencies, a special frequency-dependent rating scale is usually used to relate noise to human sensitivity. The A-weighted decibel scale (dBA) performs this compensation by weighting frequencies in a manner approximating the sensitivity of the human ear.

Noise is defined as unwanted sound and is known to have several adverse effects on people, including hearing loss, speech and sleep interference, physiological responses, and annoyance. Based on these known adverse effects, the federal government, the State of California, and many local governments have established criteria to protect public health and safety and to prevent disruption of certain human activities.

Sound Measurement

Sound pressure is measured through the A-weighted measure to correct for the relative frequency response of the human ear. That is, an A-weighted noise level de-emphasizes low and very high frequencies of sound similar to the human ear's de-emphasis of these frequencies.

Unlike linear units such as inches or pounds, decibels are measured on a logarithmic scale, representing points on a sharply rising curve. On a logarithmic scale, an increase of 10 dBA is 10 times more intense than 1 dBA, 20 dBA is 100 times more intense, and 30 dBA is 1,000 times more intense. A sound as soft as human breathing is about 10 times greater than 0 dBA. The decibel system of measuring sound gives a rough connection between the physical intensity of sound and its perceived loudness to the human ear. Ambient sounds generally range from 30 dBA (very quiet) to 100 dBA (very loud).

Sound levels are generated from a source, and their decibel level decreases as the distance from that source increases. Sound dissipates exponentially with distance from the noise source. This phenomenon is known as "spreading loss." For a single point source, sound levels decrease by approximately 6 dBA for each doubling of distance from the source. This drop-off rate is appropriate for noise generated by on-site operations from stationary equipment or activity at a project site. If noise is produced by a line source, such as highway traffic, the sound decreases by 3 dBA for each doubling of distance in a hard site environment. Line source noise in a relatively flat environment with absorptive vegetation decreases by 4.5 dBA for each doubling of distance.

Time variation in noise exposure is typically expressed in terms of a steady-state energy level equal to the energy content of the time varying period (called L_{eq}), or alternately, as a statistical description of the sound level that is exceeded over some fraction of a given observation period. For example, the L_{50} noise level represents the noise level that is exceeded 50 percent of the time. Half the time the noise level exceeds this level and half the time it is less than this level. This level also represents the level that is exceeded 30 minutes in an hour. Similarly, the L_2, L_8 and L_{25} values represent the noise levels that are exceeded 2, 8, and 25 percent of the time, or 1, 5, and 15 minutes per hour. These "L_n" values are typically used to demonstrate compliance for stationary noise sources with a city's noise ordinance, as discussed below. Other values typically noted during a noise survey are the L_{min} and L_{max}. These values represent the minimum and maximum root-mean-square noise levels obtained over the measurement period.

Because community receptors are more sensitive to unwanted noise intrusion during the evening and at night, State law and the County require that, for planning purposes, an artificial dB increment be added to quiet time noise levels in a 24-hour noise descriptor called the Community Noise Equivalent Level (CNEL) or Day-Night Noise Level (L_{dn}). The CNEL descriptor requires that an artificial increment of 5 dBA be added to the actual noise level for the hours from 7:00 p.m. to 10:00 p.m. and 10 dBA for the hours from 10:00 p.m. to 7:00 a.m. The Ldn descriptor uses the same methodology but only adds a 10 dBA increment between 10:00 p.m. and 7:00 a.m. Both descriptors give roughly the same 24 hour level, with the CNEL being only slightly more restrictive (i.e., higher).

5. Environmental Analysis
NOISE

Psychological and Physiological Effects of Noise

Physical damage to human hearing begins at prolonged exposure to noise levels higher than 85 dBA. Exposure to high noise levels affects our entire system, with prolonged noise exposure in excess of 75 dBA increasing body tensions, and thereby affecting blood pressure, functions of the heart and the nervous system. In comparison, extended periods of noise exposure above 90 dBA could result in permanent hearing damage. When the noise level reaches 120 dBA, a tickling sensation occurs in the human ear even with short-term exposure. This level of noise is called the threshold of feeling. As the sound reaches 140 dBA, the tickling sensation is replaced by the feeling of pain in the ear. This is called the threshold of pain. Table 5.13-1, *Typical Noise Levels*, shows typical noise levels from familiar noise sources.

Table 5.13-1 Typical Noise Levels

Common Outdoor Activities	Noise Level (dBA)	Common Indoor Activities
Onset of physical discomfort	120+	
	110	Rock Band (near amplification system)
Jet Flyover at 1,000 feet		
	100	
Gas Lawn Mower at three feet		
	90	
Diesel Truck at 50 feet, at 50 mph		Food Blender at 3 feet
	80	Garbage Disposal at 3 feet
Noisy Urban Area, Daytime		
	70	Vacuum Cleaner at 10 feet
Commercial Area		Normal speech at 3 feet
Heavy Traffic at 300 feet	60	
		Large Business Office
Quiet Urban Daytime	50	Dishwasher Next Room
Quiet Urban Nighttime	40	Theater, Large Conference Room (background)
Quiet Suburban Nighttime		
	30	Library
Quiet Rural Nighttime		Bedroom at Night, Concert Hall (background)
	20	
		Broadcast/Recording Studio
	10	
Lowest Threshold of Human Hearing	0	Lowest Threshold of Human Hearing

Source: Caltrans 2013a.

Vibration Fundamentals

Vibration is an oscillating motion in the earth. Like noise, vibration is transmitted in waves, but through the earth or solid objects. Unlike noise, vibration is typically of a frequency that is felt rather than heard.

Vibration can be natural—such as earthquakes, volcanic eruptions, or landslides—or man-made, such as explosions, heavy machinery, or trains. Both natural and man-made vibration may be continuous, such as from operating machinery, or impulsive, as from an explosion.

As with noise, vibration can be described by both its amplitude and frequency. Amplitude can be characterized in three ways—displacement, velocity, and acceleration. Particle displacement is a measure of the distance that a vibrated particle travels from its original position; for the purposes of soil displacement, is typically measured in inches or millimeters. Particle velocity is the rate of speed at which soil particles move in inches per second or millimeters per second. Table 5.13.2*, Human Reaction to Typical Vibration Levels*, presents the human reaction to various levels of peak particle velocity (PPV).

Table 5.13-2 Human Reaction to Typical Vibration Levels

Vibration Level Peak Particle Velocity (in/sec)	Human Reaction	Effect on Buildings
0.006–0.019	Threshold of perception, possibility of intrusion	Vibrations unlikely to cause damage of any type
0.08	Vibrations readily perceptible	Recommended upper level of vibration to which ruins and ancient monuments should be subjected
0.10	Level at which continuous vibration begins to annoy people	Virtually no risk of "architectural" (i.e., not structural) damage to normal buildings
0.20	Vibrations annoying to people in buildings	Threshold at which there is a risk to "architectural" damage to normal dwelling—houses with plastered walls and ceilings
0.4–0.6	Vibrations considered unpleasant by people subjected to continuous vibrations and unacceptable to some people walking on bridges	Vibrations at a greater level than normally expected from traffic, but would cause "architectural" damage and possibly minor structural damage

Source: Caltrans 2013b.

Vibrations also vary in frequency, and this affects perception. Typical construction vibrations fall in the 10 to 30 Hz range and usually occur around 15 Hz. Traffic vibrations exhibit a similar range of frequencies; however, due to their suspension systems, buses often generate frequencies around 3 Hz at high vehicle speeds. It is less common, but possible, to measure traffic frequencies above 30 Hz.

The way in which vibration is transmitted through the earth is called propagation. As vibration waves propagate from a source, the energy is spread over an ever-increasing area such that the energy level striking a given point is reduced with the distance from the energy source. This geometric spreading loss is inversely proportional to the square of the distance. Wave energy is also reduced with distance as a result of material damping in the form of internal friction, soil layering, and void spaces. The amount of attenuation provided by material damping varies with soil type and condition as well as the frequency of the wave.

5.13.1.1 REGULATORY BACKGROUND

To limit population exposure to physically and/or psychologically damaging as well as intrusive noise levels, the federal government, the State of California, and municipalities in the state have established standards and ordinances to control noise.

Federal

Federal Highway Administration

Proposed federal or federal-aided highway construction projects at a new location, or the physical alteration of an existing highway that significantly changes the horizontal or vertical alignment or increases the number of through-traffic lanes, require an assessment of noise and consideration of noise abatement per 23 CFR Part 772, "Procedures for Abatement of Highway Traffic Noise and Construction Noise." The Federal Highway Administration (FHWA) has adopted noise abatement criteria for sensitive receivers—such as picnic areas, recreation areas, playgrounds, active sport areas, parks, residences, motels, hotels, schools, churches, libraries, and hospitals—when "worst-hour" noise levels approach or exceed 67 dBA L_{eq} (Caltrans 2020).

US Environmental Protection Agency

In addition to FHWA standards, the EPA has identified the relationship between noise levels and human response. The EPA has determined that over a 24-hour period, an L_{eq} of 70 dBA will result in some hearing loss. Interference with activity and annoyance will not occur if exterior levels are maintained at an L_{eq} of 55 dBA and interior levels at or below 45 dBA. These levels are relevant to planning and design and useful for informational purposes, but they are not land use planning criteria because they do not consider economic cost, technical feasibility, or the needs of the community; therefore, they are not mandated.

The EPA also set 55 dBA L_{dn} as the basic goal for exterior residential noise intrusion. However, other federal agencies, in consideration of their own program requirements and goals, as well as the difficulty of actually achieving a goal of 55 dBA L_{dn}, have settled on the 65 dBA L_{dn} level as their standard. At 65 dBA L_{dn}, activity interference is kept to a minimum, and annoyance levels are still low. It is also a level that can realistically be achieved.

US Department of Housing and Urban Development

The US Department of Housing and Urban Development (HUD) has set the goal of 65 dBA L_{dn} as a desirable maximum exterior standard for residential units developed under HUD funding. (This level is also generally accepted within the State of California.) Although HUD does not specify acceptable interior noise levels, standard construction of residential dwellings typically provides 20 dBA or more of attenuation with the windows closed. Based on this premise, the interior L_{dn} should not exceed 45 dBA.

Occupational Health and Safety Administration

The federal government regulates occupational noise exposure common in the workplace through the Occupational Health and Safety Administration (OSHA) under the EPA. Such limitations would apply to the

operation of construction equipment and could also apply to any proposed industrial land uses. Noise exposure of this type is dependent on work conditions and is addressed through a facility's Health and Safety Plan, as required under OSHA, and is therefore not addressed further in this analysis.

State

General Plan Guidelines

The State of California, through its General Plan Guidelines, discusses how ambient noise should influence land use and development decisions and includes a table of normally acceptable, conditionally acceptable, normally unacceptable, and clearly unacceptable uses at different noise levels, expressed in CNEL. A conditionally acceptable designation implies new construction or development should be undertaken only after a detailed analysis of the noise reduction requirements for each land use and needed noise insulation features are incorporated in the design. By comparison, a normally acceptable designation indicates that standard construction can occur with no special noise reduction requirements. The general plan guidelines provide cities with recommended community noise and land use compatibility standards that can be adopted or modified at the local level based on conditions and types of land uses specific to that jurisdiction.

California Building Code

The California Building Code (CBC) is Title 24 of the California Code of Regulations. CBC Part 2, Volume 1, Chapter 12, Section 1206.4, Allowable Interior Noise Levels, requires that interior noise levels attributable to exterior sources not exceed 45 dBA in any habitable room. The noise metric is evaluated as either the day-night average sound level (L_{dn}) or the community noise equivalent level (CNEL), whichever is consistent with the noise element of the local general plan.

The State of California's noise insulation standards for non-residential uses are codified in the California Code of Regulations, Title 24, Building Standards Administrative Code, Part 11, California Green Building Standards Code (CALGreen). CALGreen noise standards are applied to new or renovation construction projects in California to control interior noise levels resulting from exterior noise sources. Proposed projects may use either the prescriptive method (Section 5.507.4.1) or the performance method (5.507.4.2) to show compliance. Under the prescriptive method, a project must demonstrate transmission loss ratings for the wall and roof-ceiling assemblies and exterior windows when located within a noise environment of 65 dBA CNEL or higher. Under the performance method, a project must demonstrate that interior noise levels do not exceed 50 dBA $L_{eq(1hr)}$.

Airport Noise Standards

California Code of Regulations Title 21, Section 5012, establishes 65 dBA CNEL as the acceptable level of aircraft noise for persons living in the vicinity of airports. Noise-sensitive land uses are generally incompatible in locations where the aircraft exterior noise level exceeds 65 dBA CNEL, unless an aviation easement for aircraft noise has been acquired by the airport proprietor. Assembly Bill (AB) 2776 requires any person who intends to sell or lease residential properties in an airport influence area to disclose that fact to the person buying the property.

Local Noise Standards

City of Moorpark Municipal Code

Title 17, Zoning Chapter 53, Noise of the Moorpark Municipal Code establishes prohibited noise acts, short-term and long-term construction noise limits, exterior noise limits, and noise exemptions. Table 5.13-3, *Exterior Noise Limits: City of Moorpark*, summarizes the exterior noise limits applicable to operational stationary noise sources.

Table 5.13-3 Exterior Noise Limits: City of Moorpark

Categories	Time of Day	Allowable dBA
Single Family and Multi-Family residential/rural and agricultural zones	10:00 p.m.–7:00 a.m.	55
	7:00 a.m.–10:00 p.m.	60
Commercial Office/ Neighborhood	10:00 p.m.–7:00 a.m.	55
	7:00 a.m.–10:00 p.m.	60
General Commercial/ Planned Development	10:00 p.m.–7:00 a.m.	60
	7:00 a.m.–10:00 p.m.	65
Industrial Park	Anytime	65
Limited Industrial	Anytime	70
Public Space	All Day	70

Source: Chapter 17.53.080, Exterior noise limits, Moorpark Municipal Code.
Notes: The allowable exterior noise levels as presented in Table 5.13-3 shall not exceed:

- The noise standard for a cumulative period of more than 30 minutes in any hour (L_{50}); or
- The noise standard plus 5 dB for a cumulative period of more than 15 minutes in any hour L_{25}; or
- The noise standard plus 10 dB for a cumulative period of more than 5 minutes in any hour (L_8); or
- The noise standard plus 15 dB for a cumulative period of more than 1 minute in any hour (L_2); or
- The noise standard plus 20 dB or the maximum measured ambient level, for any period of time (L_{max}).

If the measured ambient level differs from that permissible within any of the first four noise limit categories above, the noise limit for that land use shall be adjusted in 5 dB increments in each category as appropriate to reflect said ambient noise level. In the event the ambient noise level exceeds the fifth noise limit category, the maximum allowable noise level under this category shall be increased to reflect the maximum ambient noise level.
If the measurement location is on a boundary between two different zones, the noise level limit applicable to the lower noise zone plus 5 dBA shall apply.

Residential Air Conditioning or Air Handling Equipment Noise Standards

Air conditioning or air handling equipment may not exceed, if installed after January 1, 1980:

- 55 dBA at any point on neighboring property line, five feet above grade level, no closer than three feet from any wall.
- 50 dBA at the center of a neighboring patio, five feet above grade level, no closer than three feet from any wall.
- 50 dBA outside the neighboring living area window nearest the equipment.

Construction

Section 17.53.070, Prohibited Acts (F), states that it is prohibited to operate or permit the operation of any tools or equipment used in construction, drilling, repair, alteration, or demolition work so as to violate the

provisions of Table 5.13-4 between weekday (Saturdays and legal holidays observed by the city included) hours of 7:00 p.m. and 7:00 a.m., or at any time on Sundays, such that the sound there from creates a noise disturbance across a residential or commercial property line, except for emergency work of public service utilities, government agencies, or by temporary use permit issued by the city.

Section 17.53.070, Prohibited Acts, also provides noise limits for both short-term and long-term stationary and mobile construction noise equipment. However, the City is currently in the process and intends to update this part of the noise code. Therefore, to determine temporary construction noise impacts for CEQA purposes, FTA criteria is used and discussed below in Section 5.13.2, *Thresholds of Significance*.

Exemptions

Section 17.53.100, Exemptions, exempts the following from the provisions of the noise chapter:

- The emission of sound for the purpose of alerting persons to the existence of an emergency.
- The emission of sound in the performance of emergency work.
- Warning devices necessary for the protection of public safety, as for example, police, fire and ambulance sirens, and train horns.
- Occasional outdoor gatherings, public dances, shows, and sporting and entertainment events, provided said events are conducted pursuant to a permit issued by the city relative to the staging of said events.
- Construction/Demolition: Repair, remodeling or grading of real property, provided the activities occur between the hours of 7:00 a.m. to 7:00 p.m. weekdays including Saturday.
- Stationary nonemergency signaling devices.
- Domestic power tools, machinery.

5.13.1.2 EXISTING CONDITIONS

Existing Traffic Noise

On-road vehicles represent the most prominent source of noise in the City. Existing traffic noise conditions were modeled using the FHWA's traffic noise prediction model (FHWA RD-77-108). Average daily traffic (ADT) volumes, vehicle mix (auto, medium-duty truck, heavy-duty truck), speeds, time of day split (day, evening, night), speeds, and number of lanes data were provided by Iteris for highway and roadway segments throughout the city. The FHWA model predicts noise levels through a series of adjustments to a reference sound level. These adjustments account for distances from the roadway, traffic volumes, vehicle speeds, car/truck mix, number of lanes, and road width. Table 5.13-4, *Existing Traffic Noise Conditions*, lists the calculated existing noise levels on roadways at a distance of 50 feet from the nearest travel lane centerline. Figure 5.13-1, *Existing Traffic Noise Contours*, illustrates the modeled roadways and existing noise contours for 60 dBA CNEL, 65 dBA CNEL, and 70+ dBA CNEL.

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Table 5.13-4 Existing Traffic Noise Conditions

Roadway	Segment	ADT Volumes	CNEL dBA at 50 Feet	Distance to Noise Contour in Feet		
				70+ dBA CNEL	65 dBA CNEL	60 dBA CNEL
Grimes Canyon Rd	Los Angeles Ave to Championship Dr	3,615		26	55	119
	Championship Dr to Broadway	2,710	65.6	21	45	98
Championship Dr	Grimes Canyon Rd to Augusta Dr	900	64.4	9	19	40
	Augusta Dr to Walnut Canyon Rd	3,040	58.6	19	42	90
High St	Walnut Canyon Rd to Spring Rd	12,200	63.8	28	61	131
Princeton Ave	Spring Rd to SR-118 ramps	22,030	66.3	61	132	285
Poindexter Ave	Gabbert Rd to Sierra Ave	6,140	71.3	26	56	121
	Sierra Ave to Walnut Canyon Rd	9,020	65.8	34	73	157
Los Angeles Ave	Grimes Canyon Rd to Buttercreek Rd	26,510	67.5	165	355	765
	Buttercreek Rd to Tierra Rejada Rd	26,510	77.8	166	358	771
	Tierra Rejada Rd to Moorpark Ave	28,580	77.8	183	395	851
	Moorpark Ave to Spring Rd	33,915	78.5	205	443	954
	Spring Rd to Miller Pkwy-Science Dr	38,920	79.2	225	485	1,045
	Miller Pkwy-Science Dr to SR-23 ramps	41,950	79.8	237	510	1,099
	Between SR-23 ramps	23,910	80.1	157	338	728
Gabbert Rd	North of Poindexter Ave	610	77.5	6	12	26
	Poindexter Ave to Los Angeles Ave	5,405	55.8	24	52	112
Tierra Rejada Rd	Los Angeles Ave to Mountain Trail St	17,240	65.2	63	136	293
	Mountain Trail St to Mountain Meadow Dr	17,545	71.5	64	137	296
	Mountain Meadow Dr to Walnut Creek Rd	19,270	71.6	68	146	315
	Walnut Creek Rd to Peak Hill Rd	23,065	72.0	77	165	355
	Peach Hill Rd to Spring Rd	22,730	72.8	76	163	352
	Spring Rd to Miller Pkwy-Moorpark Rd	32,985	72.7	97	209	451
	Miller Pkwy-Moorpark Rd to SR-23 ramps	45,855	74.3	121	261	562
	Between SR-23 ramps	40,070	75.8	111	238	513
Walnut Canyon Rd	Broadway Rd to Championship Dr	16,160	75.2	107	230	495
	Championship Dr to Spring Rd	18,920	74.9	119	255	550
	Spring Rd to Meridian Hills	10,640	75.6	81	174	375
	Meridian Hills to High St	7,980	73.1	67	144	309
Moorpark Ave	High St to Poindexter Ave-1st St	15,885	71.9	34	72	156
	Poindexter Ave-1st St to Los Angeles Ave	10,490	67.4	25	55	118
	South of Los Angeles Ave	9,250	65.6	23	50	109
Peach Hill Rd	North of Tierra Rejada Rd (n-s segment)	5,020	65.0	19	41	88
	West of Spring Rd (e-w segment)	6,230	63.7	22	47	102

5. Environmental Analysis
NOISE

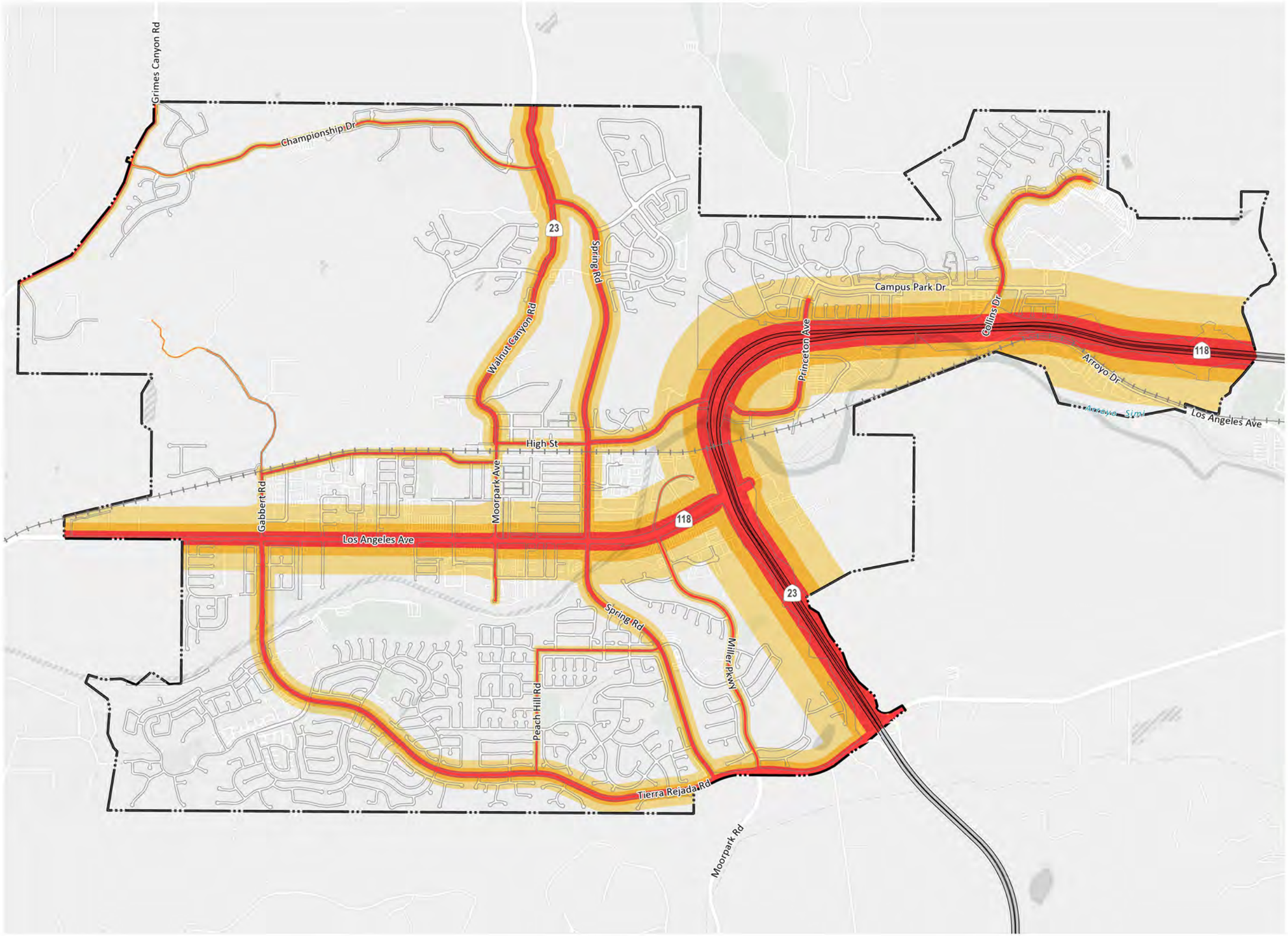
Table 5.13-4 Existing Traffic Noise Conditions

Roadway	Segment	ADT Volumes	CNEL dBA at 50 Feet	Distance to Noise Contour in Feet		
				70+ dBA CNEL	65 dBA CNEL	60 dBA CNEL
Spring Rd	Walnut Canyon Rd to Ridgecrest Dr	15,430	64.6	59	126	272
	Ridgecrest Dr to High St-Princeton Ave	22,340	71.0	75	161	348
	High St-Princeton Ave to Los Angeles Ave	22,780	72.6	76	164	352
	Los Angeles Ave to Peach Hill Rd	14,255	72.7	54	117	253
	Peach Hill Rd to Tierra Rejada Rd	12,860	70.6	51	109	236
Science Dr	North of Los Angeles Ave	2,650	70.1	10	22	47
Miller Pkwy	Los Angeles Ave to Tierra Rejada Rd	6,385	59.6	27	58	125
Collins Dr	Campus Park Dr to SR-118 ramps	19,890	66.0	49	105	226
	Between SR-118 ramps	13,650	69.8	38	81	175
SR-118	Princeton Ave to Los Angeles Ave	69,240	68.2	290	624	1,344
SR-23	Los Angeles Ave to Tierra Rejada Rd	63,480	81.4	273	589	1,269

Source: Calculated using the FHWA RD-77-108 model based on traffic data provided by Iteris. See Appendix I.

Figure 5.13-1

Existing Traffic Noise Contours



City Boundary

Railroad

Traffic Noise Contours

Existing Noise Contour 70 dBA

Existing Noise Contour 65 dBA

Existing Noise Contour 60 dBA

MADE BY MOORPARK General Plan 2050

Draft Environmental Impact Report

0 1,000 2,000 4,000 FT

Source: PlaceWorks, Iteris 2022

Date: 10/27/2022

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Aircraft Noise

There are no airports in the City of Moorpark. The nearest airport to the City is Santa Paula Airport approximately 11 miles to the northwest (AirNav 2020). The City of Moorpark does not participate in any airport noise abatement programs and is not within any airport noise contours.

Railroad Noise

Railroad operations in the city are also a source of noise along the Metrolink line. Day-night average noise levels from railroad vary depending on the number of trains per day, the timing and duration of train pass-by events, and whether or not trains must sound their warning whistles near "at-grade" crossings. Noise levels commonly range from 65 to 75 dBA CNEL at land uses adjoining a railroad right-of-way. When trains approach a passenger station or at-grade crossing, they are required to sound their warning whistle within ¼ mile. Train warning whistles typically generate maximum noise levels of 105 to 110 dBA at 100 feet.

Existing railroad noise levels were calculated using the FTA CREATE rail noise model and the Federal Rail Administration (FRA) Grade Crossing Horn Model, the average number of pass-bys, time of day, number of locomotives and type, number of rail cars and type, and speed. Moorpark currently has one track owned and operated by Southern California Regional Rail Authority (SCRRA [Metrolink]). The SCRRA line services the Ventura County Metrolink, the Amtrak Pacific Surfliner, and the Amtrak Coast Starlight. Up to two freight trains travel the line per day. Table 5.13-5, *Existing Railroad Noise Levels*, contains the calculated distances to the 65 dBA CNEL contours from existing railroad noise, both from the main line and within a quarter mile of grade crossings where horn warnings are required. Figure 5.13-2, Existing Railroad Noise Levels, shows a graphical representation of the railroad 65 dBA CNEL noise contour.

Table 5.13-5 Existing Railroad Noise Levels

Operator	Subdivision	Distance (feet) to 65 dBA CNEL Contour	Distance (feet) to 65 dBA CNEL Contour (within ¼ mile of grade crossing)
Southern California Regional Rail Authority (SCRRA) – Metrolink	Ventura	50	89
Source: Calculated using the FTA CREATE Model and FRA Grade Crossing Horn Model. See Appendix I.			

Stationary Noise

Stationary sources of noise may occur from all types of land uses. Residential uses would generate noise from landscaping, maintenance activities, and air conditioning systems. Commercial uses would generate noise from heating, ventilation, and air conditioning (HVAC) systems; loading docks; and other sources. Industrial uses may generate noise from HVAC systems, loading docks, and possibly outdoor machinery. Noise generated by residential or commercial uses is generally short and intermittent. Industrial uses may generate noise on a more continual basis. Nightclubs, outdoor dining areas, gas stations, car washes, fire stations, drive-throughs, swimming pool pumps, school playgrounds, athletic and music events, and public parks are other common stationary noise sources.

Existing Vibration

Commercial and industrial operations in the City can generate varying degrees of ground vibration, depending on the operational procedures and equipment. Such equipment-generated vibrations spread through the ground and diminish with distance from the source. The effect on buildings in the vicinity of the vibration source varies depending on soil type, ground strata, and receptor-building construction. The results from vibration can range from no perceptible effects at the lowest vibration levels, to low rumbling sounds and perceptible vibrations at moderate levels, to slight structural damage at the highest levels. In addition, future sensitive receptors could be placed within close proximity to existing railroad lines. Screening distances for new vibration-sensitive development in the city will be addressed in Section 5.13.3.2 *Impact Analysis*.

Sensitive Receptors

Certain land uses, such as residences, schools, and hospitals, are particularly sensitive to noise and vibration. Sensitive receptors in the city include residences, senior housing, schools, places of worship, and recreational areas. These uses are regarded as sensitive because they are where citizens most frequently engage in activities that are likely to be disturbed by noise, such as reading, studying, sleeping, resting, or engaging in quiet or passive recreation. Commercial and industrial uses are not particularly sensitive to noise or vibration.

5.13.2 Thresholds of Significance

According to Appendix G of the CEQA Guidelines, a project would normally have a significant effect on the environment if the project would result in:

N-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.

N-2 Generation of excessive groundborne vibration or groundborne noise levels.

N-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, if the project would expose people residing or working in the project area to excessive noise levels.

Construction Noise

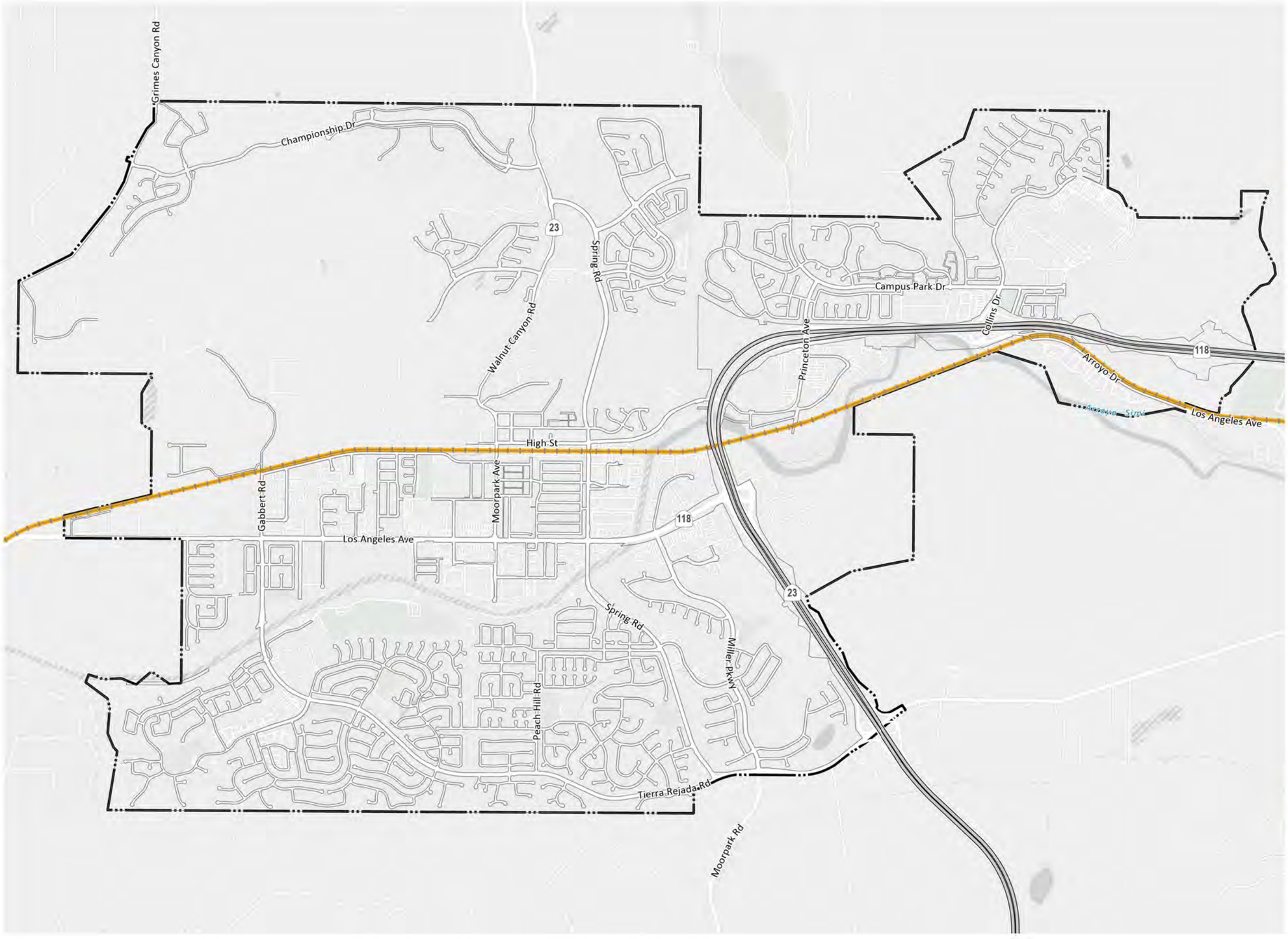
To determine construction noise impact significance, the FTA daytime criteria of 80 dBA L_{eq} for noise residential and other noise sensitive receptors is used.

Stationary Noise

Stationary noise sources are controlled and enforced by Municipal Code Section 17.53.080. A significant impact would occur if project related stationary noise sources exceed the noise standards summarized in Table 5.13-3, *Exterior Noise Limits: City of Moorpark*.

Figure 5.13-2

Existing Rail Noise Contours



City Boundary
Railroad
Rail Noise Contour 65 dBA

MADE BY MOORPARK General Plan 2050

Draft Environmental Impact Report

0 1,000 2,000 4,000 FT

Source: PlaceWorks, 2022

Date: 10/27/2022

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Traffic Noise

A project will normally have a significant effect on the environment related to noise if it will substantially increase the ambient noise levels for adjoining areas. Most people can detect changes in sound levels of approximately 3 dBA under normal, quiet conditions, and changes of 1 to 3 dBA are detectable under quiet, controlled conditions. Changes of less than 1 dBA are usually indiscernible. A change of 5 dBA is readily discernible to most people in an exterior environment. Based on this, the following thresholds of significance, similar to those recommended by the FAA, are used to assess traffic noise impacts at sensitive receptor locations. A significant impact would occur if traffic noise increase would be:

- Greater than 1.5 dBA increase for ambient noise environments of 65 dBA CNEL and higher.
- Greater than 3 dBA increase for ambient noise environments of 60–65 dBA CNEL.
- Greater than 5 dBA increase for ambient noise environments of less than 60 dBA CNEL.

Vibration

The City does not have specific limits or thresholds for vibration-induced architectural damage related to construction activities. The FTA provides criteria for acceptable levels of ground-borne vibration for various types of buildings, which are used for this analysis. These criteria are shown in Table 5.13-6, *Groundborne Vibration Criteria: Architectural Damage*. The Category III, nonengineered timber and masonry buildings, threshold of 0.2 inches per second Peak Particle Velocity (PPV) would apply to typical residential structures. While these standards are identified as the threshold of significance, a project-level analysis of vibration that may arise as part of project construction during buildout is not possible at this time for this programmatic EIR.

Table 5.13-6 Groundborne Vibration Criteria: Architectural Damage

Building Category	PPV (in/sec)
Reinforced concrete, steel, timber (no plaster)	0.5
Engineered concrete and masonry (no plaster)	0.3
Non-engineered timber and masonry buildings	0.2
Buildings extremely susceptible to vibration damage	0.12

Source: FTA 2018.
Note: PPV = peak particle velocity

5.13.3 Environmental Impacts

5.13.3.1 METHODOLOGY

Traffic noise levels for existing and future conditions were estimated using the FHWA traffic noise prediction model methodology. Traffic volumes vehicle mix (auto, medium-duty truck, heavy-duty truck), time of day split (day, evening, night), speeds, and number of lanes data were provided by Iteris for highway and roadway segments in the city for existing and Moorpark General Plan 2050 buildout conditions. The FHWA model

predicts noise levels through a series of adjustments to a reference sound level. These adjustments account for distances from the roadway, traffic volumes, vehicle speeds, car/truck mix, number of lanes, and road width. The complete distances to the 70, 65, and 60 dBA CNEL existing and future noise contours for roadway segments in the City are included in Appendix I.

Impacts of the Environment on a Project

As a result of the Supreme Court decision regarding the assessment of the environment's impacts on projects (*California Building Industry Association (CBIA) v. Bay Area Air Quality Management District (BAAQMD)*, 62 Cal. 4th 369 (No. S 213478) issued December 17, 2015), it is generally no longer under the purview of the CEQA process to evaluate the impact of existing environmental conditions on any given project. As a result, though the noise from existing sources is taken into account as part of the baseline, the direct effects of exterior noise from nearby noise sources relative to land use compatibility of a future project as a result of General Plan buildout is typically no longer a required topic for impact evaluation under CEQA. Generally, no determination of significance is required except for certain school projects, projects affected by airport noise, and projects that would exacerbate existing conditions (i.e., projects that would have a significant operational impact). Thus, CEQA does not require analysis of the potential environmental effects from siting sensitive receptors near on-road or stationary noise sources, and this type of analysis is not provided in Section 5.13.3. However, Moorpark General Plan 2050 Noise Element policies would require consideration of noise compatibility when siting new noise-sensitive receptors and enforcement when existing noise levels result in a noise disturbance.

- **Policy N-2.1 Planning for land use compatibility.** Incorporate noise considerations into land use planning decisions to prevent or minimize future noise and land-use incompatibilities per the Land Use Compatibility Table (Table 1). The analysis of traffic and other noise sources shall consider future conditions at General Plan build out.

- **Policy N-2.2 Locating noise sensitive uses.** Limit or restrict new noise sensitive land uses in proximity to existing conforming noise generating uses and planned industrial areas.

- **Policy N-3.7 Interior and exterior standards.** Continue to enforce current interior and exterior noise standards to ensure that sensitive noise receptors are not exposed to excessive noise levels from stationary noise sources. Stationary noise sources consist of, but are not limited to, machinery, heavy equipment, fans, and air conditioning equipment.

- **Policy N-3.6 Protection from mobile sources.** Require that residential and other noise-sensitive land uses adjacent to the 118 and 23 highways, major arterials, and railroad tracks be designed to incorporate elements reducing noise exposure from these sources, including such elements as walls, berms, and landscape features.

As required by Noise Element Policy N-2.1, noise levels will be considered in land use planning decisions to minimize future noise and land use incompatibilities. At the discretion of the Moorpark Planning and Building Agency, considerations may include, but not necessarily be limited to, standards that specify acceptable noise limits for various land uses, noise-reduction features, acoustical design in new construction,

and enforcement of the California Uniform Building Code and City provisions for indoor and outdoor noise levels.

5.13.3.2 IMPACT ANALYSIS

The following impact analysis addresses the thresholds of significance. The applicable thresholds are identified in brackets after the impact statement.

Impact 5.13-1: Construction activities associated with buildout of the Moorpark General Plan 2050 would result in temporary noise increases at sensitive receptors. [Threshold N-1]

As part of implementation of the proposed project, various individual land use development projects would be constructed over the duration of the Moorpark General Plan 2050 buildout. Construction is performed in distinct steps, each of which has its own mix of equipment, and, consequently, its own noise characteristics. Table 5.13-7, *Construction Equipment Noise Levels*, lists typical construction equipment noise levels recommended for noise-impact assessments, based on a distance of 50 feet between the equipment and noise receptor.

Table 5.13-7 Construction Equipment Noise Levels

Construction Equipment	Typical Max Noise Level (dBA L_{max})[1]	Construction Equipment	Typical Max Noise Level (dBA L_{max})[1]
Air Compressor	81	Pile-Driver (Impact)	101
Backhoe	80	Pile-Driver (Sonic)	96
Ballast Equalizer	82	Pneumatic Tool	85
Ballast Tamper	83	Pump	76
Compactor	82	Rail Saw	90
Concrete Mixer	85	Rock Drill	98
Concrete Pump	71	Roller	74
Concrete Vibrator	76	Saw	76
Crane, Derrick	88	Scarifier	83
Crane, Mobile	83	Scraper	89
Dozer	85	Shovel	82
Generator	81	Spike Driver	77
Grader	85	Tie Cutter	84
Impact Wrench	85	Tie Handler	80
Jack Hammer	88	Tie Inserter	85
Loader	85	Truck	88
Paver	89		

Source: FTA 2018.
[1] Measured 50 feet from the source.

As shown, construction equipment generates high levels of noise, with maximums ranging from 71 to 101 dBA. Construction of individual developments associated with implementation of the plan would temporarily increase the ambient noise environment and would have the potential to affect noise-sensitive

land uses in the vicinity of an individual project. According to Moorpark Municipal Code Section 17.53.100, Exemptions, construction activities are exempt from the noise standards between 7:00 a.m. and 7:00 p.m. weekdays, including Saturdays. Section 17.53.070, Prohibited Acts (F), prohibits construction or demolition work any time on Sundays.

Implementation of the plan anticipates an increase in development intensity to accommodate populations and employment growth. Construction noise levels are highly variable and depend on the specific locations, site plans, and construction details of individual projects. Significant noise impacts may occur from operation of heavy earth-moving equipment and truck-haul operations associated with construction of development projects, particularly if construction techniques such as impact or vibratory pile driving are proposed. The time of day that construction activity is conducted would also determine the significance of each project, particularly during the more sensitive nighttime hours. However, construction would be localized and would occur intermittently for varying periods of time.

Because specific, project-level information is not available at this time, it is not possible nor appropriate to quantify the construction noise impacts at specific sensitive receptors. In most cases, construction of individual developments associated with implementation of the plan would temporarily increase the ambient noise environment in the vicinity of each individual project, potentially affecting existing and future nearby sensitive uses. Noise Element Policy N-1.4 would help minimize the effects of intermittent and short-term construction noise.

- **Policy N-1.4 Construction noise.** Encourage enforcement of noise restrictions on hours of construction activity at noise sensitive receptors, particularly in residential areas.

However, because construction activities associated with any individual development may occur near noise-sensitive receptors and because, depending on the project type, equipment list, time of day, phasing and overall construction durations, noise disturbances may occur for prolonged periods of time or during the more sensitive nighttime hours, construction noise impacts associated with implementation of the plan are considered potentially significant.

Level of Significance before Mitigation: Potentially significant.

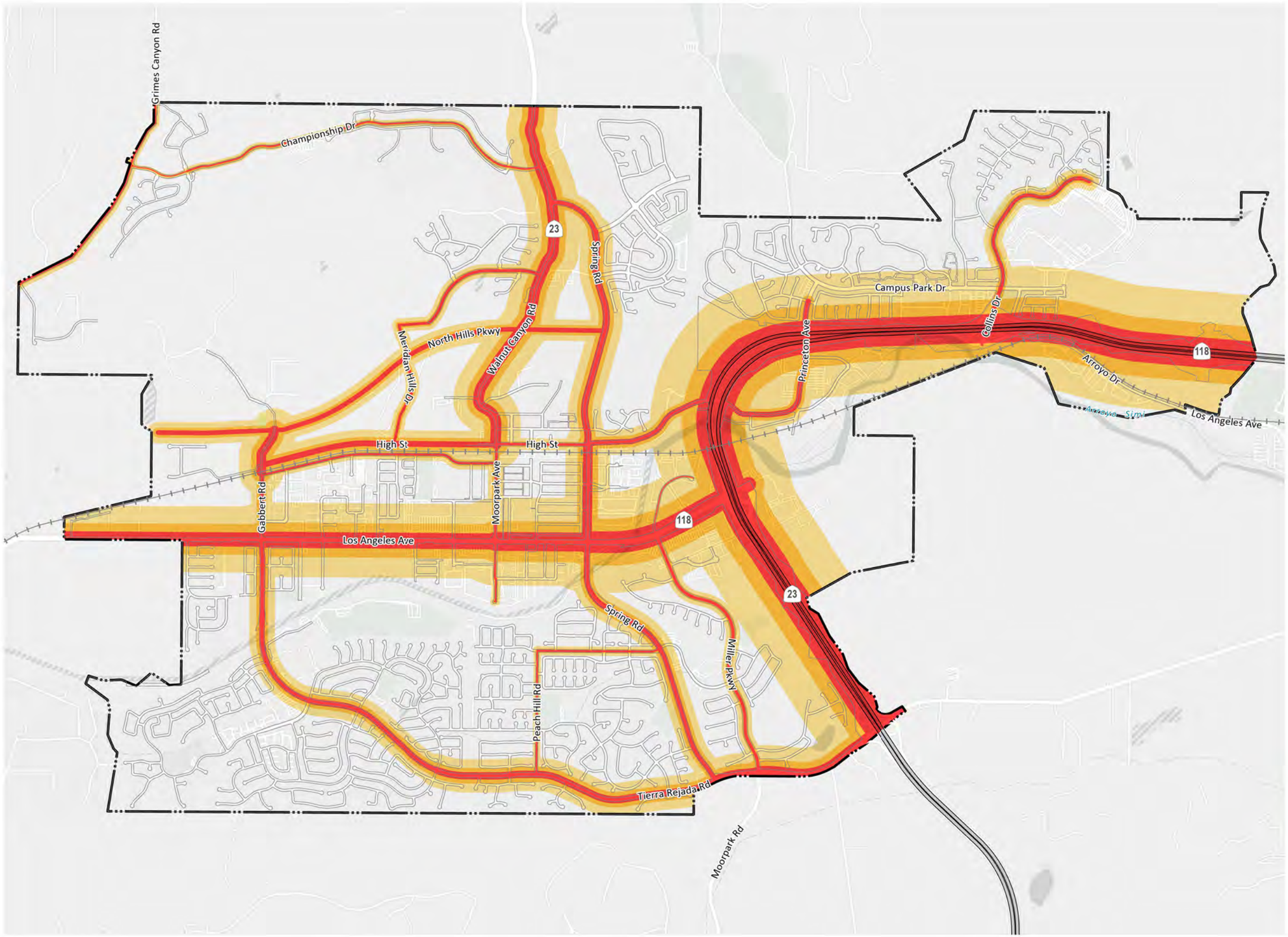
Impact 5.13-2 Buildout of the Moorpark General Plan 2050 would generate a substantial traffic noise increase on local roadways in areas that exceed established noise standards. [Threshold N-1]

On-Road Traffic Noise

Buildout of the Moorpark General Plan 2050 would result in an increase in traffic along local roadways. Figure 5.13-3, *Future Traffic Noise Contours*, illustrates the modeled roadways and future 2050 noise contours for 60 dBA CNEL, 65 dBA CNEL, and 70 dBA CNEL. The complete distances to the 70, 65, and 60 dBA CNEL noise contours for roadway segments in the city are included in Appendix I.

Figure 5.13-3

Future Traffic Noise Contours



City Boundary

Railroad

Traffic Noise Contours

Future Noise Contour 70 dBA

Future Noise Contour 65 dBA

Future Noise Contour 60 dBA

MADE BY MOORPARK General Plan 2050

Draft Environmental Impact Report

0 1,000 2,000 4,000 FT

Source: PlaceWorks, Iteris 2022

Date: 10/27/2022

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Table 5.13-8, *Projected Moorpark General Plan 2050 Buildout Traffic Noise Levels*, shows the estimated traffic noise increase along study roadway segments. The traffic noise increase is the difference between the projected future noise level and the existing noise level. As shown in this table, significant traffic noise increases are estimated along several of the study roadway segments due to implementation of the Moorpark General Plan 2050. In addition to traffic noise increases along existing roadways, this table shows the contour distances at future new roadways segments; North Hills Parkway, east of Gabbert Road; High Street, west of Moorpark Avenue; Gabbert Road, south of North Hills Parkway; and Meridian Hills Road, west of Walnut Canyon Road.

Level of Significance before Mitigation: Potentially significant.

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Table 5.13-8 Projected Moorpark General Plan Buildout 2050 Traffic Noise Levels

Roadway	Segment	ADT Volumes		dBA CNEL		
		Existing	Future Buildout	Existing	Future Buildout	Cumulative Increase
Grimes Canyon Rd	Los Angeles Ave to Championship Dr	3,615	4,460	65.6	66.5	0.9
	Championship Dr to Broadway	2,710	3,340	64.4	65.3	0.9
Championship Dr	Grimes Canyon Rd to Augusta Dr	900	1,220	58.6	59.9	1.3
	Augusta Dr to Walnut Canyon Rd	3,040	3,100	63.8	63.9	0.1
High St	Walnut Canyon Rd to Spring Rd	12,200	13,850	66.3	66.8	0.6
Princeton Ave	Spring Rd to SR-118 ramps	22,030	24,700	71.3	71.8	0.5
Poindexter Ave	Gabbert Rd to Sierra Ave	6,140	6,810	65.8	66.2	0.4
	Sierra Ave to Walnut Canyon Rd	9,020	9,100	67.5	67.5	0.0
Los Angeles Ave	Grimes Canyon Rd to Buttercreek Rd	26,510	28,100	77.8	78.0	0.3
	Buttercreek Rd to Tierra Rejada Rd	26,510	28,100	77.8	78.1	0.3
	Tierra Rejada Rd to Moorpark Ave	28,580	31,040	78.5	78.8	0.4
	Moorpark Ave to Spring Rd	33,915	39,990	79.2	79.9	0.7
	Spring Rd to Miller Pkwy-Science Dr	38,920	49,210	79.8	80.8	1.0
	Miller Pkwy-Science Dr to SR-23 ramps	41,950	46,390	80.1	80.6	0.4
	Between SR-23 ramps	23,910	28,280	77.5	78.2	0.7
Gabbert Rd	North of Poindexter Ave[1]	610	NA	55.8	NA	NA
	Poindexter Ave to Los Angeles Ave	**5,405**	**19,500**	**65.2**	**70.8**	**5.6**
Tierra Rejada Rd	Los Angeles Ave to Mountain Trail St	17,240	18,770	71.5	71.9	0.4
	Mountain Trail St to Mountain Meadow Dr	17,545	21,560	71.6	72.5	0.9
	Mountain Meadow Dr to Walnut Creek Rd	19,270	20,910	72.0	72.3	0.4
	Walnut Creek Rd to Peak Hill Rd	23,065	27,940	72.8	73.6	0.8
	Peach Hill Rd to Spring Rd	22,730	27,850	72.7	73.6	0.9
	Spring Rd to Miller Pkwy-Moorpark Rd	32,985	38,420	74.3	75.0	0.7
	Miller Pkwy-Moorpark Rd to SR-23 ramps	45,855	56,610	75.8	76.7	0.9
	Between SR-23 ramps	40,070	49,470	75.2	76.1	0.9
Walnut Cyn Rd	Broadway Rd to Championship Dr	16,160	20,810	74.9	76.0	1.1
	Championship Dr to Spring Rd	18,920	24,360	75.6	76.7	1.1
	Spring Rd to Meridian Hills	**10,640**	**23,310**	**73.1**	**76.5**	**3.4**
	Meridian Hills to High St	**7,980**	**21,760**	**71.9**	**76.2**	**4.4**
Moorpark Ave	High St to Poindexter Ave-1st St	15,885	18,770	67.4	68.1	0.7
	Poindexter Ave-1st St to Los Angeles Ave	**10,490**	**21,490**	**65.6**	**68.7**	**3.1**
	South of Los Angeles Ave	9,250	9,300	65.0	65.1	0.0

5. Environmental Analysis
NOISE

Table 5.13-8 Projected Moorpark General Plan Buildout 2050 Traffic Noise Levels

Roadway	Segment	ADT Volumes		dBA CNEL		
		Existing	Future Buildout	Existing	Future Buildout	Cumulative Increase
Peach Hill Rd	North of Tierra Rejada Rd (n-s segment)	5,020	5,100	63.7	63.8	0.1
	West of Spring Rd (e-w segment)	6,230	7,180	64.6	65.3	0.6
Spring Rd	Walnut Canyon Rd to Ridgecrest Dr	15,430	18,740	71.0	71.9	0.8
	Ridgecrest Dr to High St-Princeton Ave	22,340	27,050	72.6	73.5	0.8
	High St-Princeton Ave to Los Angeles Ave	**22,780**	**42,860**	**72.7**	**75.5**	**2.7**
	Los Angeles Ave to Peach Hill Rd	**14,255**	**21,760**	**70.6**	**72.4**	**1.8**
	Peach Hill Rd to Tierra Rejada Rd	**12,860**	**18,610**	**70.1**	**71.7**	**1.6**
Science Dr	North of Los Angeles Ave	2,650	3,270	59.6	60.5	0.9
Miller Pkwy	**Los Angeles Ave to Tierra Rejada Rd**	**6,385**	**9,930**	**66.0**	**67.9**	**1.9**
Collins Dr	Campus Park Dr to SR-118 ramps	19,890	20,190	69.8	69.9	0.1
	Between SR-118 ramps	13,650	13,860	68.2	68.2	0.1
SR-118	Princeton Ave to Los Angeles Ave	69,240	75,080	81.4	81.8	0.4
SR-23	Los Angeles Ave to Tierra Rejada Rd	63,480	72,150	81.1	81.6	0.6
North Hills Pkwy 1	East of Gabbert Rd [2]	NA	18,800	NA	70.8	NA
High St [1]	West of Moorpark Ave [2]	NA	12,600	NA	72.3	NA
Gabbert Rd [1]	South of North Hills Pkwy [2]	NA	18,200	NA	75.5	NA
Meridian Hills Rd [1]	West of Walnut Canyon Rd [2]	NA	16,700	NA	67.6	NA

Source: Calculated using the FHWA RD-77-108 model based on traffic data provided by Iteris. See Appendix I.
Bold = Significant noise increase.
NA = Not Applicable
[1] Existing segment to be replaced with new segment Gabbert Rd, south of North Hills Pkwy.
[2] Future roadways that currently do not exist.

Impact 5.13-3: Buildout of the Moorpark General Plan 2050 may expose sensitive uses to excessive levels of groundborne vibration. [Threshold N-2]

Construction Vibration Impacts

Construction activity at projects in the city would generate varying degrees of ground vibration, depending on the construction procedures and equipment. Operation of construction equipment generates vibrations that spread through the ground and diminish with distance from the source. The effect on buildings in the vicinity of the construction site varies depending on soil type, ground strata, and receptor-building construction. The results from vibration can range from no perceptible effects at the lowest vibration levels, to low rumbling sounds and perceptible vibrations at moderate levels, to slight structural damage at the highest levels. Vibration from construction activities rarely reaches the levels that can damage structures but can achieve the audible and perceptible ranges in buildings close to the construction site. Table 5.13-9, *Vibration Levels for Construction Equipment*, lists reference vibration levels for construction equipment.

Table 5.13-9 Vibration Levels for Construction Equipment

Equipment	Approximate PPV Vibration Level at 25 Feet (in/sec)
Pile Driver, Impact (Upper Range)	1.518
Pile Driver, Impact (Typical)	0.644
Pile Driver, Sonic (Upper Range)	0.734
Pile Driver, Sonic (Typical)	0.170
Vibratory Roller	0.210
Large Bulldozer	0.089
Caisson Drilling	0.089
Loaded Trucks	0.076
Jackhammer	0.035
Small Bulldozer	0.003

Source: FTA 2018.
PPV = peak particle velocity.

As shown in the table, vibration generated by construction equipment has the potential to be substantial, since it has the potential to exceed the FTA criteria for architectural damage (e.g., 0.12 inches per second [in/sec] PPV for fragile or historical resources, 0.2 in/sec PPV for nonengineered timber and masonry buildings, and 0.3 in/sec PPV for engineered concrete and masonry). Construction details and equipment for future project-level developments under the general plan buildout are not known at this time but may cause vibration impacts. Therefore, this would be a potentially significant impact.

Operational Vibration Impacts

Commercial and industrial operations throughout the city would generate varying degrees of ground vibration, depending on the operational procedures and equipment. Such equipment-generated vibrations would spread through the ground and diminish with distance from the source. In addition, future sensitive

receptors could be placed within close proximity to existing railroad lines through buildout of the Moorpark General Plan 2050.

Because specific project-level information is not available at this time, it is not possible to quantify future vibration levels at vibration-sensitive receptors that may be near existing and future vibration sources. Therefore, with the potential for sensitive uses to be exposed to annoying and/or interfering levels of vibration from commercial or industrial operations and existing railroad lines, operations-related vibration impacts associated with implementation of the Moorpark General Plan 2050 are considered potentially significant.

Level of Significance Before Mitigation: Potentially significant.

Impact 5.13-4: The proximity of the sensitive receptors in the city to an airport or airstrip would not result in exposure of future residents and/or workers to excessive airport-related noise. [Threshold N-3]

As discussed in Section 5.13.1.2, *Existing Conditions*, there are no airports in the City of Moorpark. The nearest airport is Santa Paula Airport, approximately 11 miles to the northwest (AirNav 2020). The City of Moorpark does not participate in any airport noise abatement programs and is not within any airport noise contours. Therefore, future development or sensitive receptors would not be exposed to excessive airport noise, and no impact would occur.

Level of Significance Before Mitigation: No impact.

5.13.4 Relevant General Plan Policies

Noise Element

- **Policy N-1.1 Attenuate measures.** Provide attenuation measures to reduce noise impacts from non-transportation sources through the City's Noise Ordinance, which is intended to protect people from noise generated on adjacent properties.
- **Policy N-1.2 Limit nuisance noise.** Limit the impact of nuisance noise sources.
- **Policy N-1.3 Sound Design.** Encourage functional and attractive building and site layout designs to mitigate excessive noise.
- **Policy N-1.4 Construction noise.** Encourage enforcement of noise restrictions on hours of construction activity at noise sensitive receptors, particularly in residential.
- **Policy N-2.1 Planning for land use compatibility.** Incorporate noise considerations into land use planning decisions to prevent or minimize future noise and land-use incompatibilities per the Land Use Compatibility Table (Table 1). The analysis of traffic and other noise sources shall consider future conditions at General Plan build out.

- **Policy N-2.2 Locating noise sensitive uses.** Limit or restrict new noise sensitive land uses in proximity to existing conforming noise generating uses and planned industrial areas.
- **Policy N-2.3 Truck delivery areas.** Encourage truck delivery areas to be located away from residential properties and require associated noise impacts to be mitigated per the City's Noise Ordinance.
- **Policy N-2.4 Protecting noise sensitive uses.** Protect noise sensitive land uses (such as libraries, schools, hospitals, residences, and other care facilities) from excessive, unsafe, or otherwise disruptive noise levels from adjacent land uses.
- **Policy N-2.5: Design of roadway projects.** Encourage the employment of noise attenuation measures in the design of roadway improvement projects consistent with existing and future funding.
- **Policy N-3.1 Transportation sources.** Identify sound attenuation measures that can be applicable to transportation related noise impacts.
- **Policy N-3.2 Stationary sources.** Require stationary noise sources to limit noise to levels that do not interfere with adjacent uses.
- **Policy N-3.3 New projects.** Require new projects to contribute to the mitigation of off-site traffic noise impacts to the extent that these impacts are generated by the proposed project.
- **Policy N-3.4 Local and regional collaboration.** Collaborate with local and regional transit agencies and other jurisdictions to minimize regional rail and traffic noise and other sources of noise in the City.
- **Policy N-3.5 State Motor Vehicle Standards.** Encourage the enforcement of state motor vehicle noise standards for cars, trucks, and motorcycles through coordination with the California Highway Patrol and Moorpark Police Department.
- **Policy N-3.6 Protection from mobile sources.** Require that residential and other noise-sensitive land uses adjacent to the 118 and 23 highways, major arterials, and railroad tracks be designed to incorporate elements reducing noise exposure from these sources, including such elements as walls, berms, and landscape features.
- **Policy N-3.7 Interior and exterior standards.** Continue to enforce current interior and exterior noise standards to ensure that sensitive noise receptors are not exposed to excessive noise levels from stationary noise sources. Stationary noise sources consist of, but are not limited to, machinery, heavy equipment, fans, and air conditioning equipment.

5.13.5 Level of Significance Before Mitigation

With the implementation of the Moorpark General Plan 2050 Policies, the following impacts would be **less than significant**: 5.13-4.

Without mitigation, the following impacts would be **potentially significant**:

- **Impact 5.13-1** Construction activities associated with buildout of the Moorpark General Plan 2050 would result in temporary noise increases at sensitive receptors.
- **Impact 5.13-2** Buildout of the Moorpark General Plan 2050 would generate a substantial traffic noise increase on local roadways in areas that exceed established noise standards.
- **Impact 5.13-3** Buildout of the Moorpark General Plan 2050 may expose sensitive uses to excessive levels of groundborne vibration.

5.13.6 Mitigation Measures

Impact 5.13-1

N-1 **Construction Noise Measures.** Construction contractors shall implement the following measures for construction activities conducted in the City of Moorpark. Construction plans submitted to the City shall identify these measures on demolition, grading, and construction plans. The City of Moorpark Planning and Building Agency shall verify that grading, demolition, and/or construction plans submitted to the City include these notations prior to issuance of demolition, grading, and/or building permits.

- During the entire active construction period, equipment and trucks used for project construction shall use 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.
- Impact tools (e.g., jack hammers and hoe rams) shall be hydraulically or electrically powered wherever possible. Where the use of pneumatic tools is unavoidable, an exhaust muffler on the compressed air exhaust shall be used along with external noise jackets on the tools.
- Stationary equipment, such as generators and air compressors, shall be located as far as feasible from nearby noise-sensitive uses.
- Stockpiling shall be located as far as feasible from nearby noise-sensitive receptors.
- Construction traffic shall be limited, to the extent feasible, to approved haul routes established by the City Planning and Building Agency.
- At least 10 days prior to the start of construction activities, a sign shall be posted at the entrance(s) to the job site, clearly visible to the public, that includes permitted construction days and hours, as well as the telephone numbers of the City's and contractor's authorized representatives that are assigned to respond in the event of a noise or vibration complaint. If the authorized contractor's representative receives a complaint, he/she shall investigate, take appropriate corrective action, and report the action to the City.

- Signs shall be posted at the job site entrance(s), within the on-site construction zones, and along queueing lanes (if any) to reinforce the prohibition of unnecessary engine idling. All other equipment shall be turned off if not in use for more than 5 minutes.
- During the entire active construction period and to the extent feasible, the use of noise-producing signals, including horns, whistles, alarms, and bells, shall be for safety warning purposes only. The construction manager shall use smart back-up alarms, which automatically adjust the alarm level based on the background noise level or switch off back-up alarms and replace with human spotters in compliance with all safety requirements and laws.
- If construction is anticipated for prolonged periods, as required by the Community Development Director, erect temporary noise barriers (at least as high as the exhaust of equipment and breaking line-of-sight between noise sources and sensitive receptors), as necessary and feasible, to maintain construction noise levels at or below the performance standard of 80 dBA Leq. Barriers shall be constructed with a solid material that has a density of at least 4 pounds per square foot with no gaps from the ground to the top of the barrier.

Impact 5.13-2

No feasible mitigation measures have been identified that would substantial reduce impacts associated with a substantial increase in traffic noise levels. However, a number of measures were considered for mitigating or avoiding traffic noise impacts.

Special Roadway Paving

Notable reductions in tire noise have been achieved via the implementation of special paving materials, such as rubberized asphalt or open-grade asphalt concrete overlays. For example, the California Department of Transportation conducted a study of pavement noise along Interstate 80 in Davis (Caltrans 2011) and found an average improvement of 6 to 7 dBA compared to conventional asphalt overlay.

Although this amount of noise reduction from rubberized/special asphalt materials would be sufficient to avoid the predicted noise increase due to traffic in some cases, the potential up-front and ongoing maintenance costs are such that the cost versus benefits ratio[1] may not be feasible and reasonable and would not mitigate noise to a level of less than significant in all cases. In addition, the study found that noise levels increased over time due to pavement raveling, with the chance of noise-level increases higher after a 10-year period.

Sound Barrier Walls

With a cursory review of aerial depictions of the impacted segments, the majority residences along the study segments have direct access (via driveways) to the associated roadway. Therefore, barrier walls would prevent

[1] Cost versus benefit considerations are in terms of the number of households benefited, per the general methodology employed by Caltrans in the evaluation of highway sound walls.

access to individual properties and would be infeasible. Further, these impacted homes are on private property outside of the control of future project developers, so there may be limited admittance onto these properties to construct such walls. Lastly, the costs versus benefits ratio in relation to the number of benefited households may not be feasible and reasonable in all cases.

Sound Insulation of Existing Residences and Sensitive Receptors

Exterior-to-interior noise reductions depend on the materials used, the design of the homes, and their conditions. To determine what upgrades would be needed, a noise study would be required for each house to measure exterior-to-interior noise reduction. Sound insulation may require upgraded windows, upgraded doors, and a means of mechanical ventilation to allow for a "windows closed" condition. There are no funding mechanisms and procedures that would guarantee that the implementation of sound insulation features at each affected home would offset the increase in traffic noise to interior areas and ensure that the state's 45 dBA CNEL standard for multifamily residences would be achieved.

Impact 5.13-3

Construction

N-2 **Noise and Vibration Analysis.** Prior to issuance of a building permit for a project requiring pile driving during construction within 135 feet of fragile structures, such as historical resources, within 100 feet of nonengineered timber and masonry buildings (e.g., most residential buildings), or within 75 feet of engineered concrete and masonry (no plaster); or a vibratory roller within 25 feet of any structure, the project applicant shall prepare a noise and vibration analysis to assess and mitigate potential noise and vibration impacts related to these activities. This noise and vibration analysis shall be conducted by a qualified and experienced acoustical consultant or engineer. The vibration levels shall not exceed Federal Transit Administration (FTA) architectural damage thresholds (e.g., 0.12 inches per second [in/sec] peak particle velocity [PPV] for fragile or historical resources, 0.2 in/sec PPV for nonengineered timber and masonry buildings, and 0.3 in/sec PPV for engineered concrete and masonry). If vibration levels would exceed these thresholds, alternative uses shall be used, such as drilling piles instead of pile driving and static rollers instead of vibratory rollers. If necessary, construction vibration monitoring shall be conducted to ensure vibration thresholds are not exceeded.

Operation

N-3 **Vibration Analysis.** Prior to discretionary approval by the City of Moorpark for industrial development projects subject to review under the California Environmental Quality Act (CEQA) (i.e., nonexempt projects), that utilize equipment that has the potential to result in vibration, a vibration analysis shall be conducted to assess and mitigate potential vibration impacts. This vibration analysis shall be conducted by a qualified and experienced acoustical consultant or engineer and shall follow the latest CEQA guidelines, practices, and precedents.

5.13.7 Level of Significance After Mitigation

Impact 5.13-1

Implementation of Mitigation Measure N-1 would reduce potential noise impacts during construction to the extent feasible through implementation of construction best management practices. However, due to the potential for proximity of construction activities to sensitive uses, the number of construction projects occurring simultaneously, and the potential duration of construction activities, Impact 5.13-1 (construction noise) could result in a temporary substantial increase in noise levels above ambient conditions. Therefore, impacts would remain ***significant and unavoidable***. It should be noted that the identification of this program-level impact does not preclude the finding of less-than-significant impacts for subsequent projects analyzed at the project level.

Impact 5.13-2

There are no feasible or practical mitigation measures available to reduce project-generated traffic noise to less-than-significant levels for existing residences along the affected roadway. No individual measure and no set of feasible or practical mitigation measures are available to reduce project-generated traffic noise to less-than-significant levels in all cases. Thus, traffic noise would remain a ***significant and unavoidable*** impact. It should be noted that the identification of this program-level impact does not preclude the finding of less-than-significant impacts for subsequent projects analyzed at the project level.

Impact 5.13-3

Implementation of Mitigation Measures N-2 and N-3 and adherence to associated performance standards would reduce Impact 5.13-3 to less-than-significant levels. Specifically, Mitigation Measure N-2 would require use of alternative construction techniques for construction activities proximate to historic resources to reduce potential vibration impacts during construction below the pertinent thresholds, and Mitigation Measures N-3 (operations-related vibration) would require that stationary sources reduce potential vibration impacts from commercial/industrial uses to less-than-significant levels. No significant and unavoidable vibration impacts would remain.

5.13.8 References

California Department of Transportation (Caltrans). 2011. *I-80 Davis OGAC Pavement Noise Study*.

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Federal Transit Administration (FTA). 2018, September. *Transit Noise and Vibration Impact Assessment Manual*. US Department of Transportation.

Governor's Office of Planning and Research (OPR). 2017. *State of California General Plan Guidelines*.

Harris, Cyril M. 1998. *Handbook of Acoustical Measurements and Noise Control*. 3rd edition. Woodbury, NY: Acoustical Society of America.

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5.14 POPULATION AND HOUSING

This section of the Draft Environmental Impact Report (DEIR) examines the potential for socioeconomic impacts of the proposed Moorpark General Plan 2050 on the City of Moorpark, including changes in population, employment, and demand for housing, particularly housing cost/rent ranges defined as "affordable." Current website information and pertinent documents from the City of Moorpark and other appropriate agencies were used in preparation of this section. The analysis in this section is based, in part, upon information from:

- United States Census Bureau (US Census)
- California Department of Finance (DOF)
- California Employment Development Department (EDD)
- Southern California Association of Governments (SCAG)

5.14.1 Environmental Setting

5.14.1.1 REGULATORY BACKGROUND

State Regulations

California Housing Element Law

California planning and zoning law requires each city and county to adopt a general plan for future growth (California Government Code Section 65300). This plan must include a housing element that identifies housing needs for all economic segments and provides opportunities for housing development to meet that need. At the state level, the Housing and Community Development Department (HCD) estimates the relative share of California's projected population growth that would occur in each county based on California DOF population projections and historical growth trends. These figures are compiled by HCD in a Regional Housing Needs Assessment (RHNA) for each region of California. Where there is a regional council of governments, the HCD provides the RHNA to the council, and the council assigns a share of the regional housing need to each of its cities and counties. The process of assigning shares gives cities and counties the opportunity to comment on the proposed allocations. HCD oversees the process to ensure that the council of governments distributes its share of the state's projected housing need.

California housing element laws (California Government Code Section 65580–65589) require that each city and county identify and analyze existing and projected housing needs within its jurisdiction and prepare goals, policies, and programs to further the development, improvement, and preservation of housing for all economic segments of the community commensurate with local housing needs. State law recognizes the vital role local governments play in the supply and affordability of housing. To that end, California Government Code requires that the housing element achieve legislative goals to:

- Identify adequate sites to facilitate and encourage the development, maintenance, and improvement of housing for households of all economic levels, including persons with disabilities.

- Remove, as legally feasible and appropriate, governmental constraints to the production, maintenance, and improvement of housing for persons of all incomes, including those with disabilities.
- Assist in the development of adequate housing to meet the needs of low- and moderate-income households.
- Conserve and improve the condition of housing and neighborhoods, including existing affordable housing. Promote housing opportunities for all persons regardless of race, religion, sex, marital status, ancestry, national origin, color, familial status, or disability.
- Preserve for lower-income households the publicly assisted multifamily housing developments in each community.

At the time of preparation of this DEIR, the City of Moorpark is currently preparing its housing element for the 2021-to-2029 plan period.

Regional Planning

Southern California Association of Governments

SCAG is a regional council of governments representing Imperial, Los Angeles, Orange, Riverside, San Bernardino, and Ventura counties, which encompass over 38,000 square miles. SCAG is the federally recognized metropolitan planning organization for this region and a forum for addressing regional issues concerning transportation, the economy, community development, and the environment. SCAG is also the regional clearinghouse for projects requiring environmental documentation under federal and state law. In this role, SCAG reviews proposed development and infrastructure projects to analyze their impacts on regional planning programs. As the Southern California region's metropolitan planning organization, SCAG cooperates with the Ventura County Air Pollution Control District, the California Department of Transportation, and other agencies to prepare regional planning documents. The City of Moorpark is in the Ventura Council of Governments subregion of SCAG.

SCAG has developed regional plans to achieve specific regional objectives. On September 3, 2020, SCAG adopted Connect SoCal, the 2020–2045 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS), a long-range visioning plan that balances future mobility and housing needs with economic, environmental, and public health goals (SCAG 2020). This long-range plan, which is a requirement of the state of California and the federal government, is updated by SCAG every four years as demographic, economic, and policy circumstances change. A component of Connect SoCal is a set of growth forecasts that estimates employment, population, and housing growth. These estimates are used by SCAG, transportation agencies, and local agencies to anticipate and plan for growth. For more information regarding SCAG and Connect SoCal, see Section 5.11, *Land Use and Planning*, of this DEIR.

5.14.1.2 EXISTING CONDITIONS

Methodology

The project area's demographics are examined in the context of existing and projected populations and housing units for Ventura County and the City of Moorpark. Information on population, housing, and employment for the project area is available from several sources, including:

- **United States Census Bureau.** The official US Census is described in Article I, Section 2 of the Constitution of the United States. It calls for an actual enumeration of the people every 10 years, to be used for apportionment among the states of seats in the House of Representatives. The US Census Bureau publishes population and household data gathered in the decennial census.
- **American Community Survey.** The American Community Survey is facilitated by the US Census Bureau and provides estimates of population, housing, household, economic, and transportation trends between decennial censuses.
- **California Department of Finance.** The DOF prepares and administers California's annual budget. Other duties include estimating population demographics and enrollment projections.
- **California Employment Development Department.** The EDD collects, analyzes, and publishes statistical data and reports on California's labor force, industries, occupations, employment projections, wages, and other important labor market and economic data.
- **Southern California Association of Governments.** Policies, programs, employment, housing, and population projections adopted by SCAG to achieve regional objectives are expressed in Connect SoCal.

Population

As of January 2022, according to the California DOF, the City of Moorpark and Ventura County have a current population of approximately 35,399 persons and 833,652 persons, respectively (DOF 2022).[1] Table 5.14-1, *Population Trends in the City of Moorpark and Ventura County*, exhibits the population growth trends in the city and the county. According to the data, population has steadily increased in both the city and the county from 2010 to 2022, with the largest percentage increase for the city being 1.32 percent from 2014 to 2015.

[1] Department of Finance data is used in this existing conditions discussion to describe existing population and housing conditions in the greater context of Ventura County. Elsewhere in this chapter and in this DEIR, existing conditions data for Moorpark is based on the data in Table 3-1, *Existing Land Use Summary*, in Chapter 3, *Project Description*, of this DEIR. Based on the methodology in Table 3-1, the City of Moorpark's estimated existing population is 36,445 persons, which is slightly higher than the DOF estimate of 35,399 persons.

Table 5.14-1 Population Trends in the City of Moorpark and Ventura County

Year	City of Moorpark		Ventura County	
	Population	Percent Change	Population	Percent Change
2010	34,421	N/A	823,318	N/A
2011	34,727	0.89%	829,960	0.81%
2012	34,932	0.59%	834,960	0.60%
2013	35,189	0.74%	840,637	0.68%
2014	35,345	0.44%	845,279	0.55%
2015	35,811	1.32%	848,459	0.38%
2016	36,239	1.20%	849,335	0.10%
2017	36,346	0.30%	848,232	0.13%
2018	36,564	0.60%	848,112	0.01%
2019	36,627	0.17%	844,259	0.45%
2020	36,211	1.14%	842,843	0.17%
2021	35,821	1.08%	840,093	0.33%
2022	35,399	1.18%	833,652	0.77%

Source: DOF 2021, 2022.

Housing

As shown in Table 5.14-2, *Historical Housing Growth Trends in the City of Moorpark and Ventura County*, the rate of housing growth has varied over the years.

Table 5.14-2 Historical Housing Growth Trends in the City of Moorpark and Ventura County

Year	City of Moorpark		Ventura County	
	Total Housing Units	Percent Change	Total Housing Units	Percent Change
2010	10,738	N/A	281,695	N/A
2011	10,760	0.20%	282,268	0.20%
2012	10,780	0.19%	282,923	0.23%
2013	10,804	0.22%	283,575	0.23%
2014	10,835	0.29%	284,489	0.32%
2015	10,996	1.49%	285,808	0.46%
2016	11,168	1.56%	287,080	0.45%
2017	11,255	0.78%	288,074	0.35%
2018	11,346	0.81%	288,579	0.18%
2019	11,410	0.56%	289,647	0.37%
2020	11,756	3.03%	293,080	1.19%
2021	11,756	0%	293,756	0.23%
2022	11,769	0.11%	294,989	0.42%

Source: DOF 2021, 2022.

Housing units in Moorpark are primarily single-family homes. Table 5.14-3, *Housing Units by Type in the City of Moorpark and Ventura County*, identifies the prevalence of housing types in the city and county. As shown in Table 5.14-3, in 2022, 73 percent of housing units in Moorpark and 63 percent of housing units in the county were detached single-family homes. In 2022, 13 percent of housing units in Moorpark were multifamily homes with two or more units, compared to 22 percent of housing units in the county.

Table 5.14-3 Housing Units by Type in the City of Moorpark and Ventura County

	City of Moorpark		Ventura County	
Type	Number of Units	Percent	Number of Units	Percent
Single-Family Detached	8,593	73%	187,124	63%
Single-Family Attached	1,563	13%	32,164	11%
Multifamily (2 to 4 Units)	227	2%	16,439	6%
Multifamily (5 or More Units)	1,237	11%	47,839	16%
Mobile Homes	148	1%	11,418	4%
Total	**11,768**	**100%**	**294,984**	**100%**
Vacancy Rate	Percent Vacant = 2.6%		Percent Vacant = 4.9%	
Household Size	Household Size = 3.09		Household Size = 2.93	

Source: DOF 2022.

Employment

According to the California EDD, the growth rate of employment in Moorpark and Ventura County increased throughout 2010 to 2019, saw a sharp decrease in 2020, then increased through 2022. Moorpark and Ventura County employment among local residents and annual employment change percentages are shown in Table 5.14-4, *City of Moorpark and Ventura County Employment Trends*. In 2022, Moorpark's employed residents made up 4.7 percent of Ventura County's total employment of 396,200.

Table 5.14-4 City of Moorpark and Ventura County Employment Trends

	City of Moorpark		Ventura County	
Year	Employment (Persons)	Percent Change	Employment (Persons)	Percent Change
2010	17,300	N/A	382,400	N/A
2011	17,500	1.56%	386,000	0.94%
2012	17,900	2.29%	393,600	1.97%
2013	18,000	0.56%	397,900	1.09%
2014	18,200	1.11%	400,300	0.60%
2015	18,500	1.65%	403,000	0.67%
2016	18,700	1.08%	403,100	0.02%
2017	18,900	1.07%	404,500	0.35%
2018	18,900	0%	406,800	0.57%
2019	18,900	0%	406,600	0.05%
2020	17,400	-7.94%	373,300	-8.19%
2021	17,700	1.72%	380,000	1.79%
2022 (July)	18,500	4.52%	396,200	4.26%

Sources: EDD 2022.

Table 5.14-5, *City of Moorpark, Industry by Occupation Among Employed Residents (2020),* shows the city's total employed civilian residents by occupation and industry in 2019. According to the estimates calculated by the US Census, Moorpark had an employed civilian labor force (16 years and older) of 18,583 in 2022. The four largest occupational categories were educational services and health care and social assistance; professional, scientific, and management, and administrative and waste management services; manufacturing; and finance and insurance, and real estate and rental and leasing.

Table 5.14-5 City of Moorpark, Industry by Occupation Among Employed Residents (2020)

Industry/Occupation	Number	Percent
Agriculture, forestry, fishing and hunting, and mining	325	2%
Construction	820	4%
Manufacturing	2,320	12%
Wholesale Trade	611	3%
Retail trade	1,709	9%
Transportation and warehousing, and utilities	492	3%
Information	571	3%
Finance and insurance, and real estate and rental and leasing	1,798	10%
Professional, scientific, and management, and administrative and waste management services	2,613	14%
Educational services, and health care and social assistance	4,537	24%
Arts, entertainment, and recreation, and accommodation and food services	1,369	7%
Other services, except public administration	735	4%
Public administration	683	4%
Total Employed Residents	**18,583**	**100%**

Source: U.S. Census 2020.
Note: Employment figures count employed civilian residents 16 years and older. Percentages may not total 100% due to rounding.

Job-Housing Balance

The ratio of jobs to housing is important because an imbalanced ratio can lead to physical impacts on the environment. The "job-housing ratio" or "jobs-housing balance" is generally measured by comparing the total number of jobs compared to the number of housing units or employed residents in a defined geographic area without regard to economic constraints or individual preferences. The jobs-housing balance has implications for mobility, air quality, and the distribution of tax revenues and is one indicator of a project's effect on growth and quality of life in the project area. There is no ideal ratio adopted in state, regional, or city policies. The American Planning Association is an authoritative resource for community planning best practices, including the following recommendations for assessing job-housing balance:

- Jobs-housing ratio
  - Recommended target: 1.5 jobs per housing unit
  - Recommended range: 1.3 to 1.7 jobs per housing unit
- Jobs-employed resident ratio
  - Recommended target: 1 job per employed resident
  - Recommended range: 0.8 to 1.25 jobs per employed resident (Weitz 2003)

The American Planning Association recognizes that an ideal ratio will vary across jurisdictions and that, beyond the numerical ratio, it is also important for there to be a match between the types of jobs available in a community, the skills of the local labor force, and the characteristics of available housing, such as price, size, and location (Weitz 2003).

According to data released by SCAG, in 2017 (the most recent year for which data are available) Moorpark had 12,235 jobs (SCAG 2019). As shown in Table 5.14-2, in 2017 Moorpark had 11,255 housing units. Therefore, in 2017 Moorpark had a jobs-housing ratio of 1.1 (12,235 jobs/11,255 housing units), which is considered imbalanced using the APA's recommended range of 1.3 to 1.7 jobs per housing unit. As shown in Table 5.14-4, in 2017 Moorpark had 18,900 employed residents. Therefore, in 2017, Moorpark had a jobs-employed resident ratio of 0.6 (12,235 jobs/18,900 employed residents), which is considered slightly imbalanced using the recommended range of 0.8 to 1.25 jobs per employed resident.

Forecast

Regional Growth Forecast

Table 5.14-6, *SCAG Projections, City of Moorpark and Ventura County*, shows SCAG's regional forecast population and job projections for 2016 to 2045 for Moorpark and the county. According to SCAG, the city and county are forecast to experience high growth in the next two decades. SCAG's regional growth forecast projects that the population in Moorpark will increase from 36,700 to 42,200 persons, a difference of 5,500 persons (a 15 percent increase) between 2016 and 2045. The number of housing units in the city are forecast to increase from 11,000 to 13,000, a difference of 2,000 (an 18.2 percent increase) between 2016 and 2045. The number of jobs in the city are forecast to increase from 11,300 to 15,000, a difference of 3,700 (a 32.7 percent increase) between 2016 and 2045. As shown in Table 5.14-5, SCAG projects a lower level of growth in Ventura County as a whole, with a projected 11.4 percent population growth, 12.9 percent housing unit growth, and 16.1 percent job growth.

Table 5.14-6 SCAG Projections, City of Moorpark and Ventura County

	2016	2045	Projected Change 2016–2045	Projected Percent Change 2016–2045
Ventura County				
Population	850,000	947,000	97,000	11.4%
Housing Units	271,000	306,000	35,000	12.9%
Jobs	335,000	389,000	54,000	16.1%
City of Moorpark				
Population	36,700	42,200	5,500	15.0%
Housing Units	11,000	13,000	2,000	18.2%
Jobs	11,300	15,000	3,700	32.7%

Source: SCAG 2020.

Regional Housing Needs Assessment

As shown in Table 5.14-7, *City of Moorpark 2021–2029 Regional Housing Needs Assessment*, Moorpark's RHNA allocation for the 2021–2029 planning period is 1,289 units.

Table 5.14-7 City of Moorpark 2021–2029 Regional Housing Needs Assessment

Income Category (Based on County AMI)	Number of Units	Percentage
Very Low	377	29%
Low	233	18%
Moderate	245	19%
Above Moderate	434	34%
Total	**1,289**	**100%**

Source: SCAG 2021.
Note: AMI = Area Median Income

5.14.2 Thresholds of Significance

According to Appendix G of the CEQA Guidelines, a project would normally have a significant effect on the environment if the project would:

P-1 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).

P-2 Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere.

5.14.3 Environmental Impacts

The applicable thresholds are identified in brackets after the impact statement.

Impact 5.14-1: The proposed project would directly result in population growth in the project area. [Threshold P-1]

One of the purposes of a general plan is to adequately plan for and accommodate future growth. As shown in Table 5.14-8, *Buildout Comparison of Existing Conditions to the Moorpark General Plan 2050*, implementation of the proposed project would result in an increase of 5,488 housing units, 17,336 residents, and 7,334 jobs over approximately 20 years. Population projects are a conservative estimate based on full buildout of the 2050 Moorpark General Plan to support the CEQA analysis; however, the current general plan failed to reach its population projection during the plan period.

Table 5.14-8 Buildout Comparison of Existing Conditions to the Moorpark General Plan 2050

Scenario	Existing	Moorpark General Plan 2050	Net Difference
Population	36,445	53,781	17,336
Housing Units	11,537	17,025	5,488
Jobs	12,915	20,249	7,334
Jobs-Housing Ratio	1.12	1.19	0.07

Housing and Population Growth

At buildout, there would be 17,025 housing units and 53,781 people in Moorpark. As shown in Table 5.14-9, *Buildout Comparison of the Moorpark General Plan 2050 to SCAG Projections*, the forecast population and housing units (53,781 persons and 17,025 housing units) at Moorpark General Plan 2050 buildout would exceed the SCAG growth projections (42,200 persons and 13,000 housing units) by 28 percent and 31 percent, respectively.

Table 5.14-9 Buildout Comparison of the Moorpark General Plan 2050 to SCAG Projections

Scenario	SCAG Projections (2045)	Moorpark General Plan 2050	Net Difference (Percent)
Population	42,000	53,781	11,781 (28%)
Housing Units	13,000	17,025	4,025 (31%)
Jobs	15,000	20,249	5,249 (35%)
Jobs-Housing Ratio	1.15	1.19	0.04 (3%)

It is important to note the differences between project buildout and SCAG projections. SCAG projections are utilized in this analysis for general comparison purposes. Buildout of the city is not linked to a development timeline and is based on a reasonable worst-case buildout of the parcels in the city. In addition, the proposed

project provides policy-level guidance and does not contain specific project proposals. SCAG projections are based on annual increments in order to develop regional growth projections for land use and transportation planning over a 20-year horizon to 2040.

A comparison of the Moorpark General Plan 2050 buildout to SCAG's population, housing, and employment projections assists in providing context for comparison. More importantly, the state of California has a shortage of housing. In 2019, Governor Newsom signed several bills to address the need for more housing, including the Housing Crisis Act of 2019 (Senate Bill 330). The proposed project addresses the need for additional housing to accommodate population growth in the city. The Housing and Land Use Elements of the Moorpark General Plan 2050 include several policies to support a variety of housing types and densities. For example:

- **Policies HE-3.1 through HE-3.6** of the Housing Element facilitate well-designed housing that is diverse in product type, occupancy, location, affordability, and tenure and that meets the existing and future needs of residents.
- **Policies LU-3.1 through LU-3.3** of the Land Use Element require the city to provide for a diversity of residential densities, product types, lot sizes, and designs.
- **Policy LU-10.2** of the Land Use Element promotes an equitable distribution of housing types for all income groups and ages throughout the city.
- **Policy LU-12.1** of the Land Use Element requires new residential development be consistent with the City-adopted growth ordinance policies.

Thus, although the increases to population and housing units are greater than SCAG's regional forecasts for 2040, impacts would be less than significant with the incorporation of the Housing and Land Use Elements policies, which include aiming to provide housing to meet the community's demand.

Employment Growth

The proposed project would allow for 4,783,912 square feet of additional nonresidential development. The development would consist of job-generating land uses, such as commercial, office, industrial, and institutional uses. These uses are estimated to generate a total of 20,249 jobs, approximately 7,334 more jobs compared to existing conditions. This is considered a substantial increase in employment and an increase that would indirectly induce population growth. The forecast for employment (20,249 jobs) in the city at Moorpark General Plan 2050 buildout would exceed the SCAG growth projections (15,000 jobs); the number of jobs would be 35 percent higher than the SCAG estimates.

Jobs-Housing Balance

As stated above, implementation of the Moorpark General Plan 2050 would create up to 20,249 jobs and 17,025 residential units in the City of Moorpark. This would result in the city's job-housing ratio increasing from 1.12 to 1.19, but it would still be below the target ratio of 1.3 to 1.7 jobs for every housing unit. The

Moorpark General Plan 2050 would introduce more job-generating land uses than what is currently available. In general, the land uses identified in the Moorpark General Plan 2050 would provide opportunities for residents to both live and work in the city rather than commuting to other areas. The Economic Development Element identifies several policies aimed at providing a workforce that accommodates high-paying jobs for Moorpark residents. For example, Policies ED-1.4 and ED-1.5 of the Economic Development Element would prioritize economic development activities that create employment opportunities and promote the development of housing opportunities suited to the range of incomes in order to increase the number of residents and support an adequate and reliable workforce. Therefore, though buildout of the proposed project would directly and indirectly induce population and employment growth, the jobs-housing ratio in the city would improve with implementation of the Moorpark General Plan 2050 compared to both existing conditions and SCAG projections.

Conclusion

Implementation of the Moorpark General Plan 2050 would directly induce population and employment growth in the area but would slightly improve the jobs-housing balance. Furthermore, the purpose of general plan updates is to accommodate increased growth in a responsible manner. The Moorpark General Plan 2050 accommodates future growth by providing for infrastructure and public services to accommodate the projected growth (see Section 5.10, *Hydrology and Water Quality*; Section 5.15, *Public Services*; Section 5.17, *Transportation*; and Section 5.19, *Utilities and Service Systems*). Proposed policies under the Moorpark General Plan 2050's Housing, Land Use, and Economic Development Elements would ensure the city supports a variety of housing types and densities and provides job growth to accommodate Moorpark residents. Therefore, implementation of the proposed project would result in a less than significant impact relating to population and employment growth.

Level of Significance Before Mitigation: Less than significant.

Impact 5.14-2: Project implementation would not result in displacing people and/or housing. [Threshold P-2]

Moorpark is developed with a variety of land uses, and the proposed Moorpark General Plan 2050 includes minor changes in land use, with the majority of changes concentrated in the central part of the city. Land use changes include converting commercial designations to mixed use and increasing residential density in existing residential areas. Changes would occur on lands that offer opportunities for enhancement and in areas where business prosperity, job opportunities, and civic activity can be strengthened. These land use changes are intended to shape future development to protect existing residential neighborhoods, economically successful commercial and industrial districts, and parks and open spaces.

Compliance with the Housing Element would facilitate the development of a variety of housing types by providing a supply of land that is adequate to accommodate the RHNA and maintain an inventory of housing opportunity sites. As part of the Housing Element, the City prepared a land inventory to show how it could meet the requirements for the regional housing needs allocation at a variety of affordability levels based on the permitted density of development (e.g., apartments, townhomes, single-family homes, mobile

homes). According to the RHNA, the City's share of regional future housing needs is 1,289 new units between 2021 through 2029 (SCAG 2021). The city has approximately 11,537 housing units; the proposed Moorpark General Plan 2050 would increase the number of housing units in the City by 5,488; and the total number of housing units in the city at buildout would be 17,025.

Land use changes under the Moorpark General Plan 2050 would increase opportunities for housing in the city—for example, by converting commercial designations to mixed-use and increasing residential density in existing residential areas. The proposed Land Use Plan would provide land use designations for a variety of housing types and provide for additional residential opportunities throughout Moorpark. The Moorpark General Plan 2050 would accommodate 5,488 new housing units compared to existing conditions, exceeding the RHNA goal of 1,289 new units. Therefore, impacts to the displacement of people and/or housing would be less than significant as a result of the proposed project implementation.

Level of Significance Before Mitigation: Less than significant.

5.14.4 Relevant General Plan Policies

Economic Development Element

- **Policy ED-1.4 Local workforce.** Increase the number of residents working in the city, by prioritizing economic development activities that create employment opportunities suited to the skills and education of current and future residents.

- **Policy ED-1.5 Workforce housing.** Support an adequate and reliable workforce for local businesses, by promoting the development of housing opportunities suited to the range of incomes in accordance with the Land Use Element and the Housing Element.

Housing Element

- **Policy HE-3.1 Housing Sites.** Identify adequate sites to be made available and zoned at the appropriate densities, to achieve housing goals set forth in the RHNA.

- **Policy HE-3.2 Adequate Service Levels.** Ensure residential sites and developments have appropriate and adequate levels of public services, facilities, circulation, and other infrastructure and services.

- **Policy HE-3.3 Housing Design.** Encourage exemplary design in housing architecture, site layout, and landscaping consistent with the General Plan, design standards, and sustainability principles.

- **Policy HE-3.4 Mixed Use Development.** Promote and encourage mixed-use residential and commercial uses, where appropriate, to create more vibrant neighborhoods and activity centers.

- **Policy HE-3.5 Expanded Housing Options. S**upport and facilitate a broader range of housing options for college students and faculty, farmworkers, disabled people, seniors, and homeless people.

- **Policy HE-3.6 Missing Middle Income.** Support the development of missing middle-income housing, including smaller courtyard housing, triplex/duplexes, cottage housing, and other small-lot developments.
- **Policy HE-5.1 Fair Housing Services.** Support fair housing services to residents, property owners, landlords, lenders, and others in the provision, financing, and occupancy of housing.
- **Policy HE-5.2 Prohibit Discrimination.** Work to end discrimination in either the sale, rental, financing, or occupancy of housing on the basis of state or federal protected classes.
- **Policy HE-5.3 Equitable Access to Resources.** Work to ensure that all neighborhoods have fair access to public facilities, supporting infrastructure, and community services.
- **Policy HE-5.4 Inclusive Public Participation.** Provide an open and receptive forum for City residents, commissions, stakeholders, and City staff to discuss opportunities to improve fair housing.
- **Policy HE-5.5 Municipal Practices.** Administer municipal programs and activities relating to community development and housing in a manner that affirmatively furthers fair housing.

Land Use Element

- **Policy LU-3.1 Housing for all residents.** Provide a mix of residential densities to accommodate the housing needs of all members of the community and address Moorpark's fair share of regional housing needs consistent with the Housing Element.
- **Policy LU-3.2 Housing types.** Provide for the development of a diversity of residential product types, lot sizes, and designs, unless determined by the City to be infeasible due to the size of the project.
- **Policy LU-3.3 Broader mix of housing types.** Facilitate the development of mid-range, or "missing middle," housing units such as duplexes, multiplexes, courtyard homes, and townhomes.
- **Policy LU-10.2 Access to housing.** Promote an equitable distribution of housing types for all income groups and ages throughout the city and promote mixed-income developments in all areas of the City.
- **Policy LU-12.1 Managed growth.** Require that new residential development be consistent with City-adopted growth ordinance policies (including but not limited to Save Open Space and Agricultural Resources) for location and standards.

5.14.5 Level of Significance Before Mitigation

Upon implementation of regulatory requirements and standard conditions of approval, the following impacts would be less than significant: 5.14-1 and 5.14-2.

5.14.6 Mitigation Measures

No significant adverse impacts were identified, and no mitigation measures are necessary.

5.14.7 Level of Significance After Mitigation

No mitigation measures are required, and impacts would be less than significant.

5.14.8 References

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5.15 PUBLIC SERVICES

This section of the Draft Environmental Impact Report (DEIR) evaluates the potential for the Moorpark General Plan 2050 (proposed project) to public services, specifically, fire protection and emergency services, police protection, school services, and library services. Park services are addressed in Section 5.16, *Recreation*. Public and private utilities and services, including water, wastewater, and solid waste services and systems, are addressed in Section 5.19, *Utilities and Service Systems*. Impacts associated with wildfire events are evaluated in Section 5.20, *Wildfire*. The analysis in this section is based in part on responses to questionnaires sent to public service providers in Moorpark, which are included as Appendix J to this DEIR.

5.15.1 Fire Protection and Emergency Services

5.15.1.1 ENVIRONMENTAL SETTING

Regulatory Background

International

International Fire Code

The International Fire Code (IFC) is a model code for regulating minimum fire-safety requirements for new and existing buildings, facilities, storage, and processes. The IFC includes general and specialized technical fire- and life-safety regulations, with topics addressing fire-department access, fire hydrants, automatic sprinkler systems, fire alarm systems, fire and explosion hazards safety, use and storage of hazardous materials, protection of emergency responders, industrial processes, and various other topics. The IFC is issued by the International Code Council, which is an international organization of building officials.

State

California Building Code

The State of California provides a minimum standard for building design through the California Building Code (CBC) (California Code of Regulations, Title 24, Part 2). The CBC is based on the International Building Code but has been modified for California conditions. It is generally adopted on a jurisdiction-by-jurisdiction basis, subject to further modification based on local conditions. Commercial and residential buildings are plan-checked by local city building officials for compliance with the CBC. Typical fire safety requirements of the CBC include the installation of sprinklers in all high-rise buildings; the establishment of fire resistance standards for fire doors, building materials, and particular types of construction; and the clearance of debris and vegetation within a prescribed distance from occupied structures in wildfire hazard areas.

California Fire Code

The California Fire Code is based on the 2021 IFC and includes amendments from the State of California fully integrated into the code (California Code of Regulations, Title 24, Part 9). The California Fire Code contains fire safety-related building standards that are referenced in other parts of Title 24 of the California Code of

Regulations. The California Fire Code is updated once every three years, and the 2022 update will go into effect on January 1, 2023.

California Health and Safety Code

Sections 13000 et seq. of the California Health and Safety Code include fire regulations for building standards (also in the California Building Code), fire protection and notification systems, fire protection devices such as extinguishers and smoke alarms, high-rise building and childcare facility standards, and fire suppression training.

Local

Moorpark Municipal Code

Fire Protection Facilities Fee

Chapter 3.36.020, Fire Protection Facilities Fee, of the municipal code focuses on fire protection and emergency services impacts associated with new development projects. It requires any building permit for new construction in Moorpark to include a fee for fire protection facilities. The chapter sets the methods for calculating fees for residential and nonresidential construction and sets how the fire department can use the revenue from the fees. Table 5.15-1, *Fire Protection Facilities Development Impact Fees*, shows the development impact fees by development type in the city.

Table 5.15-1 Fire Protection Facilities Development Impact Fees

	Single Family Dwelling	Multifamily Dwelling	Mobile Home Dwelling	Commercial Use	Industrial Use
Fire Protection Area	**Per dwelling unit**			**Per sq. ft. gross floor area**	
Citywide	$979.46	$721.87	$587.08	$0.49	$0.49

Source: Moorpark 2022.

Existing Conditions

The Ventura County Fire Department (VCFD) is an all-risk agency that provides fire and emergency medical services to seven cities, including Moorpark, and 480,000 citizens in unincorporated areas of Ventura County. The VCFD provides a variety of public safety services, including fire protection, medical aid, rescue, hazardous materials response, and educational safety programs to children, adults, and seniors. Other services include fire code enforcement and regulation, development plan reviews, home and business inspections, fire code permits, film permits, and a fire hazard reduction program.

Fire Station, Staffing, and Equipment

VCFD is divided into five battalions by geological regions. Each battalion encompasses several fire stations, with a battalion chief in command. Moorpark is part of Battalion 4, with its headquarters at Station 41 in Simi Valley. As of 2020, VCFD consists of 583 personnel: 450 firefighters, 74 nonsafety personnel, 36 dispatchers, and 23 fire prevention personnel (VCFD 2020).

As shown in Figure 5.15-1, *Community Facilities*, and Figure 5.15-2, *Critical Lifeline Facilities,* there are two VCFD fire stations in Moorpark—Station 40 at 4185 Cedar Spring Street and Station 42 at 295 East High Street. Table 5.15-2, *Existing Staffing and Equipment*, summarizes staffing and equipment information on these two fire stations. As shown in the table, each station is staffed with one captain, three personnel, one engineer, and one firefighter paramedic (Cook 2022). All VCFD engines and trucks carry basic life support equipment, and firefighters provide emergency medical care. Station 42 includes a bicycle repair station and Station 40 includes an Urban Search and Rescue (USAR) apparatus that carries equipment for incidents such as trench rescue, building collapse, high and vertical angle rescue, and confined space rescue. Additionally, VCFD uses GPS on its vehicles and computer-aided dispatch to identify and dispatch the closest available fire engine to the emergency (Moorpark 2020).

Table 5.15-2 Existing Staffing and Equipment

Type	Staffing	Equipment
Station 40 4185 Cedar Springs St Moorpark, CA 93021	1 Captain 3 Personnel 1 Engineer 1 Firefighter Paramedic	2 Fire Engines 1 Reserve Engine 1 Utility Truck 1 USAR Apparatus
Station 42 295 E. High St. Moorpark, CA 93021	1 Captain 3 Personnel 1 Engineer 1 Firefighter Paramedic	1 Fire Engine 1 Reserve Engine 1 Brush Engine

Source: Cook 2022.

Fire and Medical Incidents

In 2020, VCFD responded to 47,272 calls for services, including 35,304 emergency medical calls, 1,485 fire calls, 2,540 rescue calls, 3,155 public service calls, 3,645 alarm calls, 1,724 hazardous material calls, and 64 other calls. In Moorpark, there were 2,208 calls for services in 2020. Compared to other regions in the county, Moorpark has the third lowest number of calls for services, with the cities of Thousand Oaks and Simi Valley being the highest (VCFD 2020).

Response Times and Protocol

According to VCFD, response times depend on the type of incident, location, weather conditions, existing or potential emergencies, resources available, and the information VCFD is provided with. Table 5.15-3, *Response Protocol and Resources*, shows the typical number and types of resources VCFD dispatches in an emergency (VCFD 2022). It is important to note that the table below does not have the full list of incidents, but only lists those that are most likely in Moorpark. Additionally, based on mutual aid agreements between cities and other neighboring jurisdictions, the closest available emergency personnel will respond to emergency calls for service, regardless of whether the need is in the responding agency's jurisdiction.

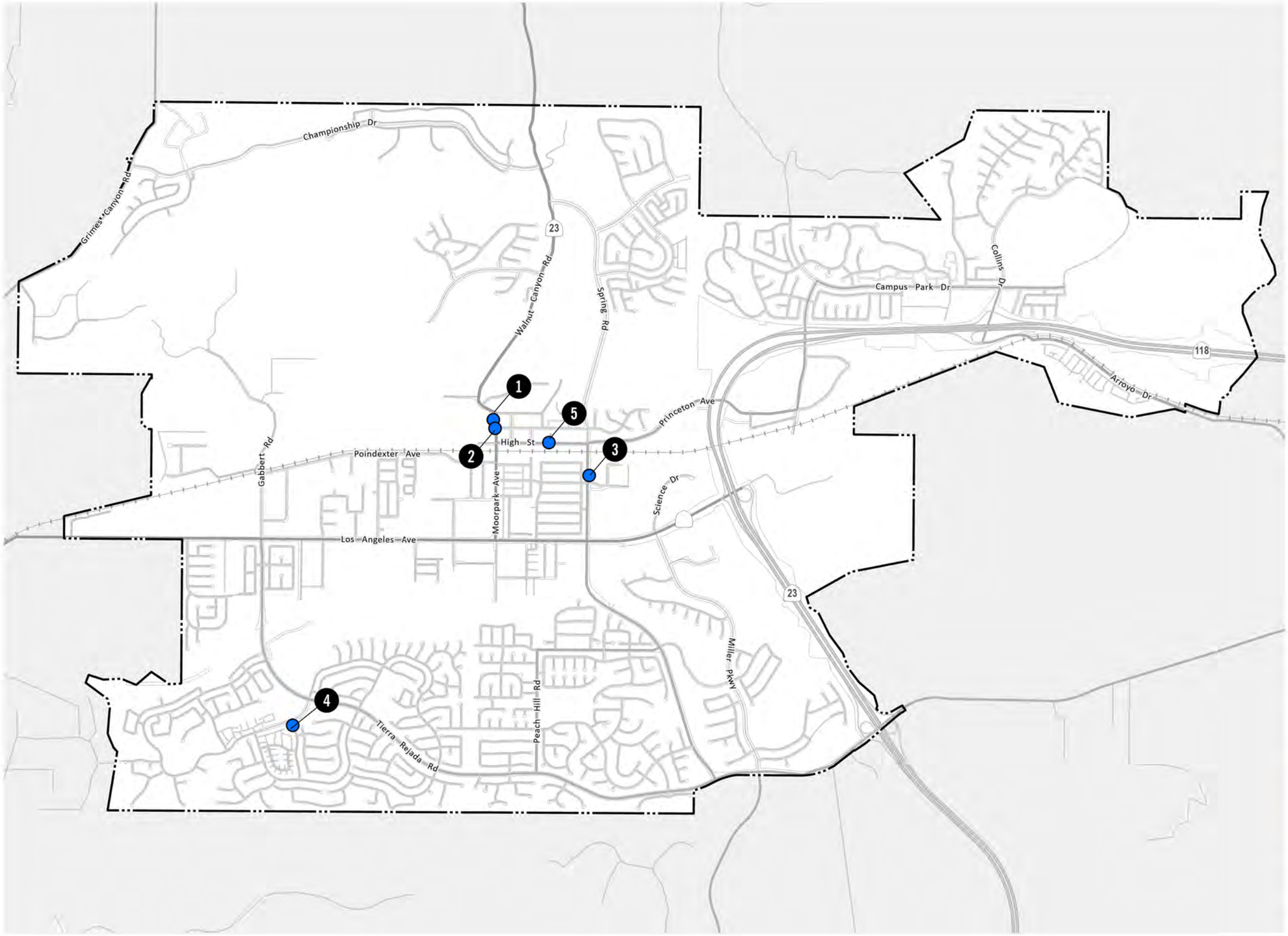
Table 5.15-3 Response Protocol and Resources

Type	Staffing	Equipment
Emergency Medical Services	N/A	1 Ambulance 1 Fire Engine
Multicasualty Response (Over 10 Victims)	1 Division Chief 2 Battalion Chiefs 1 Paramedic Squad	5 Fire Engines 2 Fire Trucks 3 Ambulances
Traffic Collision	N/A	1 Fire Engine 1 Fire Truck 1 Ambulance
Traffic Collision Heavy Rescue	1 Battalion Chief 1 Paramedic Squad	2 Fire Engines 1 Truck 1 Ambulance
Structural Fire	1 Battalion Chief 1 Squad	3 Fire Engines 1 Fire Truck
If on-scene report is "Working Structure Fire"—additional resources	1 Battalion Chief 1 Safety Officer 1 Investigator 1 Light & Air Unit	2 Fire Engines
Wildland Fire	1 Battalion Chief 1 VCFD Handcrew 2 CALFIRE Handcrews 1 Investigator	5 Fire Engines 1 Water Tender 1 Dozer 2 Helicopters
Technical Rescue	2 Battalion Chiefs 1 Paramedic Squad 1 USAR)	2 Fire Engines 1 Fire Truck I Ambulance

Source: VCFD 2022.

VCFD response time goals and response statistics are based on population density throughout its service area, which includes the unincorporated county area and the cities of Camarillo, Moorpark, Ojai, Simi Valley, Port Hueneme, Santa Paula, and Thousand Oaks. Moorpark contains both suburban and rural areas. VCFD has a goal of 8.5 minutes response time for calls. VCFD's current average response time for a call is 6 minutes and 8 seconds (Cook 2022).

Figure 5.15-1
Community Facilities



City Boundary

Community Facilities

1. Moorpark City Hall
2. Moorpark Library
3. Police Services Center
4. Ventura County Fire Station 40
5. Ventura County Fire Station 42

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Source: PlaceWorks, 2022

Date: 9/29/2022

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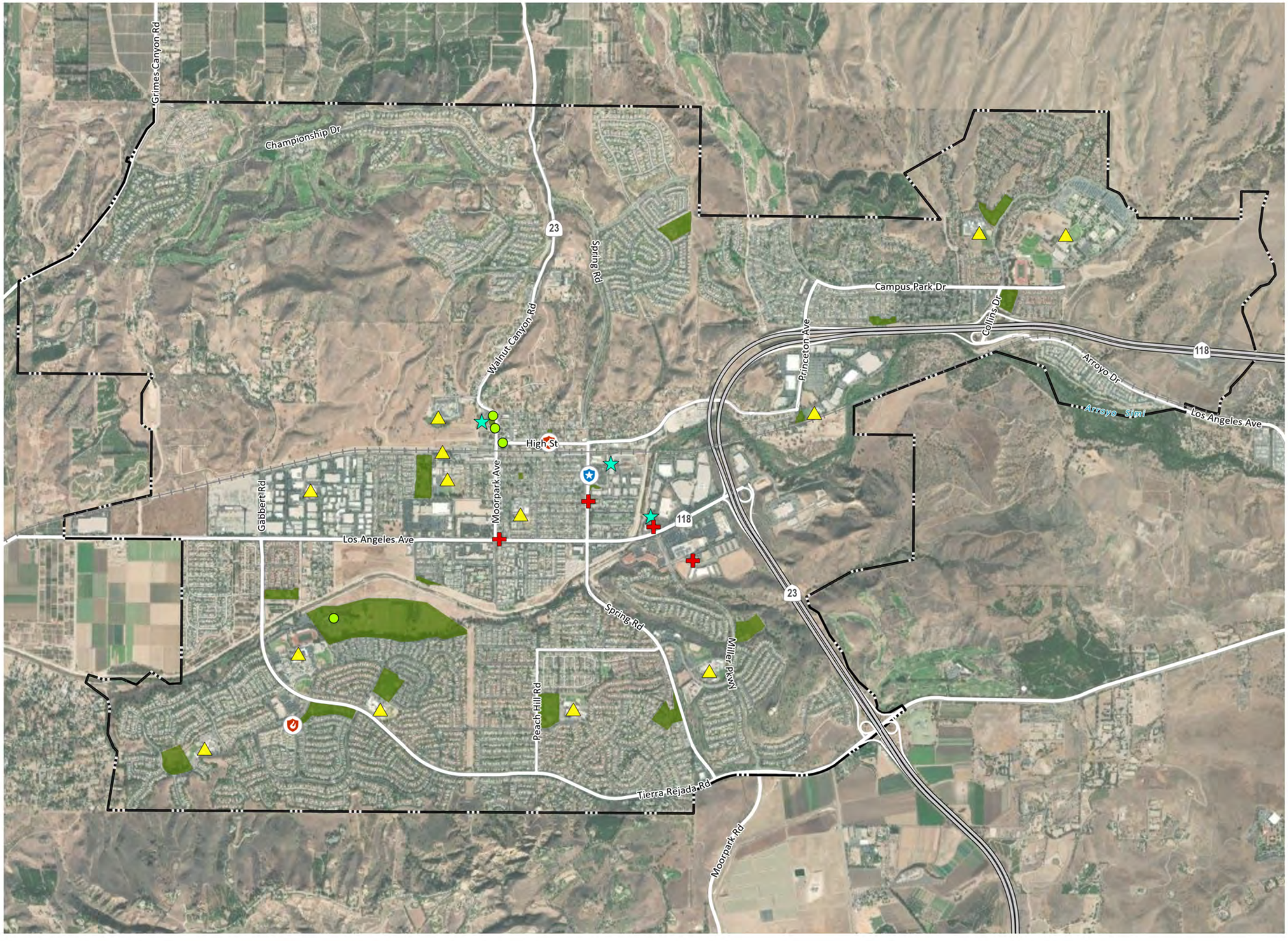
Figure 5.15-2
Critical Lifeline Facilities



City Boundary
Police Services Center
Fire Station
Community Facility
Government Facility
Medical
School/College Campuses
Parks

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Source: PlaceWorks, 2022

Date: 9/29/2022

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VCFD Service Agreements

VCFD has service agreements with several entities that provide enhanced services throughout Ventura County, including the City of Moorpark. Additional service agreement include:

- California Department of Forestry and Fire Protection
- California Fire Assistance Agreement (CFAA)
- LACOFD (Los Angeles County Fire Department)
- VEN (Ventura City Fire) OXN (OXNARD) Regional Partners
- MRCA (Mountain Recreation & Conservation Authority) (Happy Camp)
- LAFD (Los Angeles City Fire)
- USFS (United States Forest Service)
- KRN (Kern County Fire)
- NPS (National Park Service)
- USCG (United States Coast Guard) inland waterways response (Cook 2022)

5.15.1.2 THRESHOLDS OF SIGNIFICANCE

According to Appendix G of the CEQA Guidelines, a project would normally have a significant effect on the environment if the project would:

FP-1 Result in a substantial adverse physical impact associated with the provisions of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for fire protection services.

5.15.1.3 ENVIRONMENTAL IMPACTS

The following impact analysis addresses thresholds of significance, which are identified in brackets after the impact statement.

Impact 5.15-1: Buildout of the Moorpark General Plan 2050 would introduce new structures and residents/workers into the Ventura County Fire District service boundaries, increasing the requirement for fire protection facilities and personnel. [Threshold FP-1]

Future development and population growth in the city would increase the demand for the provision of local fire services and increase the need for new fire facilities, apparatus, and personnel to maintain adequate response times. The Moorpark General Plan 2050 would result in an increase of 17,336 people by 2050 buildout, resulting in total of 53,781 people in the city.

VCFD has a goal of 8.5 minutes for calls and has a current response time of 6 minutes and 8 seconds (Cook 2022). VCFD currently does not have any deficiencies at Stations 40 or 42, and the anticipated increases in population and businesses can be adequately served by existing fire stations 40 and 42 (Cook 2022). However,

implementation of the Moorpark General Plan 2050 would require additional staffing at Stations 40 and 42 to continue delivering the current level of service to existing and new residents and businesses. In the event that service demands begin to exceed the service capacity of the existing and planned stations and their current and proposed staffing, the VCFD would consider adding additional companies to the response system. Existing stations, along with Stations 40 and 42, are able to accommodate additional companies without having to physically expand the stations.

Fire vehicles, equipment, and expansion of existing facilities is funded partially through Development Impact Fees (DIF) from new development (Section 3.36.020 of the Moorpark Municipal Code) and well as contractual funding from the State of California Department of Forestry and Fire protection as contract county for services (Cook 2022). However, the majority of the funds for facilities, equipment, and service personnel come from the City's General Fund. Funding from property taxes, as a result of population growth, would be expected to grow roughly proportional to any increase in residential units, businesses, and/or industrial/manufacturing in Moorpark The additional demand for fire services and protection generated within the city would be satisfied through DIF and the General Fund.

Development in the city would also be reviewed by VCFD for compliance with applicable provisions of the California fire and residential codes. Additionally, any future new construction projects in the city would be required to pay DIF that contribute to the City's funding to acquire, construct, and furnish new fire protection and emergency services facilities and to purchase new equipment. This would ensure that future development would benefit from the most current fire prevention and safety standards, which is expected to help keep service demands within projected year-over-year increases.

Furthermore, policies in the Safety Element of the Moorpark General Plan 2050 would ensure adequate protection of public health and safety as they relate to fire and emergency services, such as Policies SE-1.16 and Policies SE-9.1 through SE-9.3. Funding for additional staff, equipment, and facilities to serve the growing population would come from the City's General Funds and DIF. Therefore, impacts to fire protection and emergency services and facilities would be less than significant.

Level of Significance Before Mitigation: Less than significant impact.

5.15.1.4 RELEVANT GENERAL PLAN POLICIES

Safety Element

- **Policy SE-1.16 Agency coordination.** Coordinate with Ventura County Fire Department, Ventura County Sheriff's Office, and Ventura County Office of Emergency Services to ensure effective preparation, response, and recovery services are available throughout the community before, during, and after a seismic event.

- **Policy SE-4.2 California Building Standards Code and Fire Code.** Continue to adopt and enforce the most recent version of the California Building Standards Code and Fire Code, as well as California Fire Safe Standards for new and existing development.

- **Policy SE-4.4 Fire safety plans.** New development within Very High Fire Hazard Severity Zones or the Wildland Urban Interface must prepare a fire safety plan for review and approval by the Ventura County Fire Department prior to issuance of building permit.
- **Policy SE-4.6 Vegetation management funding.** Coordinate with the Ventura County Fire Department and Ventura Regional Fire Safe Council to obtain funding for and conduct vegetation and fuel modification or management.
- **Policy SE-4.7 Egress and ingress.** Require new development within a Very High Fire Hazard Severity Zone to have at least two egress and ingress options, visible street signs that identify evacuation routes, and adequate water supply for structural suppression.
- **Policy SE-7.2 Hazardous materials business plans.** Require business owners to incorporate into their business plans submitted to the Ventura County Fire Department those measures necessary to minimize hazardous materials accidents due to intense ground shaking potential and flooding. Ensure that the plans are updated as necessary.
- **Policy SE-9.1 Fire safety services.** Work with the Ventura County Fire Department to provide fire prevention, protection, and emergency preparedness services that adequately protect residents, employees, visitors, and structures from fire and fire-related emergencies.
- **Policy SE-9.2 Staffing and equipment.** Coordinate with Ventura County Fire Department to ensure adequate staffing and equipment for fire protection services throughout the City to quickly respond to emergencies.
- **Policy SE-9.3 Fair share extension.** Require new development to fund a fair share extension of fire services to maintain service standards, including personnel and capital improvements costs.

5.15.1.5 LEVEL OF SIGNIFICANCE BEFORE MITIGATION

Upon implementation of regulatory requirements and standard conditions of approval, the following impacts would be less than significant: 5.15-1.

5.15.1.6 MITIGATION MEASURES

No significant adverse impacts were identified, and no mitigation measures are necessary.

5.15.1.7 LEVEL OF SIGNIFICANCE AFTER MITIGATION

No mitigation measures are required, and impacts would be less than significant.

5.15.2 Police Protection

5.15.2.1 ENVIRONMENTAL SETTING

Regulatory Background

Local

Moorpark Municipal Code

Police Facilities Fee

Chapter 3.36.090, Police Facilities Fee, of the Moorpark Municipal Code focuses on police services impacts associated with new development projects. This chapter requires any building permit for new construction to include a fee for police protection facilities. The chapter sets the methods for calculating both residential and nonresidential construction fees and the ways the Ventura County Sheriff's Office (VCSO) can use the revenue from the fees. Table 5.15-4, *Police Facilities Development Impact Fees*, shows the development impact fees by development type in the city.

Table 5.15-4 Police Facilities Development Impact Fees

Police Protection Area	Single Family Dwelling	Multifamily Dwelling	Mobile Home Dwelling	Commercial Use	Industrial Use
	Per dwelling unit			Per sq. ft. gross floor area	
Citywide	$1,167.00	$1,167.00	$1,167.00	$0.75	$0.75

Source: Moorpark 2022.

Existing Conditions

The City of Moorpark contracts with the VCSO for all police protection services, including administration, patrol, and investigation services. As shown in Figure 5.15-1 and Figure 5.15-2, the Moorpark Police Services Center is located at 610 Spring Road and provides police protection services for Moorpark and unincorporated areas of Ventura County, including Santa Rosa Valley, Moorpark Home Acres, Happy Camp, Fruitvale, Santa Susanna Knolls, Box Canyon, Tapo Canyon, Balcom Canyon, Bradley, Stockton, and Grimes Canyon (VCSO 2022a).

Staffing and Equipment

As shown in Table 5.15-5, *Existing Staff Levels*, the Moorpark Police Services Center employs 37 sworn and nonsworn officers, and professional staff. Additionally, the Police Service Center is equipped with 10 patrol Tahoes, 2 cadet pickup trucks, 2 motorcycles, 2 traffic Tahoes, 6 detective cars, and 2 Volunteering in Policing cars (Fazio 2022; Purnell 2022). Based on current staffing levels, the City provides one sworn officer for every 1,125 residents. In general, the city is divided into two primary beats with 12 hour shifts, two shifts per day, seven days a week. Additionally, two overlapping patrol deputies are provided during peak hours (10:30 am to 3:00 am) seven days a week. The Police Service Center also coordinates all police volunteers and volunteer programs, including the Moorpark Volunteers in Policing Program. The program consists of citizens who are

trained to perform routine police functions such as parking enforcement, vacation house checks, special event security, crime report writing, traffic control, station tours, and administrative work.

Table 5.15-5 Existing Staffing Levels

Type	Staffing
Captain	1
Management Assistant II	1
Administrative Assistant	1
Patrol Officers	20
Traffic Units	2 Motors and 2 Traffic Units
Traffic Cadets	1
Detective Sergeant	1
Detectives	2
Special Enforcement Deputies	2
School Resource Officers	1
Investigator	1
Community Service Officer	1
Total	**40**

Source: Fazio 2022 and Purnell 2022. Staffing estimates were rounded to the nearest whole number.

Performance Standards

In 2017, VCSO responded to a total of 6,237 calls for services in Moorpark (VCSO 2017). VCSO's response time target for Priority One calls—that is, life-threatening emergencies such as a shooting or a felony in progress—is under 7 minutes. VCSO does not have an established response time goal for Priority Two calls. In 2019 and 2020, the average time for Priority One calls was 5 to 6.5 minutes, and the average time for Priority Two calls was approximately 11.5 minutes in 2019. Based on the VCSO's standards, the average response time goals were met during the past year (Moorpark 2020).

Crime Statistics

Moorpark has seen a decline in crime from 2019 to 2021, and in 2021 the city had a crime rate of 5.28 per 1,000 residents (VCSO 2022b). As shown in Table 5.15-6, *Moorpark Crime Statistics*, the number of violent and property crimes have declined from 2019 to 2021.

Table 5.15-6 Moorpark Crime Statistics

	Property Crime (per 1,000 people)	Violent Crime (per 1,000 people)	Total Crimes (per 1,000 people)
2021	4.67	0.61	5.28
2020	6.26	0.47	6.73
2019	6.22	0.71	6.93

Source: VSCO 2022b.

Existing Programs and Services

VCSO also operates various programs and services that increase public awareness about crimes; builds relationships between residents and police staff; and maintains the safety of the residents within its service area. Existing programs and services include:

- **Citizen Academy.** 12-week course that provides an overview of the police department's function and operational procedures.
- **Parent Project.** 10-week course intended for parents with difficult or out-of-control adolescents to educate them on strategies to prevent and respond to destructive behaviors—truancy, alcohol and other drug use, gangs, occult practices, running away, violence, and suicidal behaviors.
- **Ride Along Program.** A ride along with peace officers during their regular duties is intended to enhance the public's understanding of law enforcement.
- **School Resource Officer.** Typically staffed at high schools, SROs are responsible for general law enforcement on campus using the community policing philosophy.
- **Social Media Outreach.** Includes Nextdoor, Twitter, Ring, and Nixle.
- **Volunteers in Policing (VIP).** VIP members perform routine police functions allowing deputies to concentrate more on the duties that only sworn personnel can perform. Citizens who volunteer for this program will undergo a background investigation and be carefully screened as to judgment, maturity, and ability to work within a team concept.
- **Explorer Program**. A program to educate and involve the youth of the community in police operations and interest them in law enforcement functions whether they aspire to enter police work or not.

5.15.2.2 THRESHOLDS OF SIGNIFICANCE

According to Appendix G of the CEQA Guidelines, a project would normally have a significant effect on the environment if the project would:

PP-1 Result in a substantial adverse physical impact associated with the provisions of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the

construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for police protection services.

5.15.2.3 ENVIRONMENTAL IMPACTS

The applicable thresholds are identified in brackets after the impact statement.

Impact 5.15-2: Buildout of the Moorpark General Plan 2050 would introduce new structures and residents/workers into the Ventura County Sheriff's Office service boundaries, thereby increasing the requirement for police protection facilities and personnel. [Threshold PP-1]

As the city's population and employment growth increases, the need for sheriff services is expected to grow. The Moorpark General Plan 2050 would result in an increase of 17,336 people by 2050 buildout, resulting in total of 53,781 people in the city.

VCSO's response time target for Priority One calls—that is, life-threatening emergencies such as a shooting or a felony in progress—is under 7 minutes. In 2019 and 2020, the average time for Priority One calls was 5 to 6.5 minutes (Moorpark 2020). Increases in population in Moorpark have the potential to effect service response times below the target goal established by the VCSO. If calls for service increase and exceed the capacity of VCSO's existing workforce, additional staff would be needed, and ongoing revenue would be needed to fund additional staff. The VCSO monitors crime and response numbers when evaluating the staffing needs. The additional officers would not be hired all at the same time because the growth in population would occur over time. Moreover, the hiring of the additional officers would be dependent on the department's assessed needs, based primarily on the growing number of calls for service or decreases in average response times in the future.

Funds for additional police facilities, equipment, and officers would come from the DIF collected from new development (Section 3.36.090, Police Facilities Fee, of the Moorpark Municipal Code). However, the majority of the funds for facilities, equipment, and service personnel come from the City's General Fund. Funding from property taxes, as a result of population growth, would be expected to grow roughly proportional to any increase in residential units and nonresidential uses in Moorpark. The additional demand for police services generated within the city would be satisfied through DIF and the General Fund.

Furthermore, goals and policies in the Safety Element of the Moorpark General Plan 2050 would ensure adequate protection of police services, including Policies SE-1.16, SE-1.18, SE-8.1, and SE-8.2.

As development increases in the city, the available funds from taxes and DIF received from such development would provide the additional facilities, equipment, and officers needed to serve the growing population. Therefore, impacts to police services would be less than significant

Level of Significance Before Mitigation: Less than significant impact.

5.15.2.4 RELEVANT GENERAL PLAN POLICIES

Safety Element

- **Policy SE-1.16 Agency coordination.** Coordinate with Ventura County Fire Department, Ventura County Sheriff's Office, and Ventura County Office of Emergency Services to ensure effective preparation, response, and recovery services are available throughout the community before, during, and after a seismic event.
- **Policy SE-1.18 Ready Ventura County Program.** Coordinate with the Ventura County Sheriff's Office of Emergency Services to update and coordinate the Ready Ventura County Program as relevant to the City of Moorpark.
- **Policy SE-8.1 Response times.** Work with the Ventura County Sheriff's Office to achieve and maintain appropriate response times for all call priority levels to provide responsive police services for the safety of residents and visitors.
- **Policy SE-8.2 Staffing.** Coordinate with the Ventura County Sheriff's Office to maintain optimum staffing levels for both sworn officers and civilian support staff to provide quality police services to Moorpark.
- **Policy SE-8.3 Community relations.** Work with the Ventura County Sheriff's Office to maintain a dialogue with the community to improve relationships and continually explore innovative means to communicate with the public on police services.
- **Policy SE-8.4 Public Safety Services.** Ensure that all neighborhoods, business districts, and other locations in the City receive an equitable and effective level of public safety services and feel safe from natural hazards, crime, vehicle hazards, and discrimination.

5.15.2.5 LEVEL OF SIGNIFICANCE BEFORE MITIGATION

Upon implementation of regulatory requirements and standard conditions of approval, the following impacts would be less than significant: 5.15-2.

5.15.2.6 MITIGATION MEASURES

No significant adverse impacts were identified, and no mitigation measures are necessary.

5.15.2.7 LEVEL OF SIGNIFICANCE AFTER MITIGATION

No mitigation measures are required, and impacts would be less than significant.

5.15.3 School Services

5.15.3.1 ENVIRONMENTAL SETTING

Regulatory Background

State

California State Assembly Bill 2926: School Facilities Act of 1986

To assist in providing school facilities to serve students generated by new development, Assembly Bill (AB) 2926 was enacted in 1986 and authorizes a levy of impact fees on new residential and commercial/industrial development. The bill was expanded and revised in 1987 through the passage of AB 1600, which added Sections 66000 et seq. to the Government Code. Under this statute, payment of impact fees by developers serves as CEQA mitigation to satisfy the impact of development on school facilities.

California Senate Bill 50

Senate Bill (SB) 50, passed in 1998, provides a comprehensive school facility financing and reform program and enables a statewide bond issue to be placed on the ballot. Under the provisions of SB 50, school districts are authorized to collect fees to offset the costs associated with increasing school capacity as a result of development and related population increases. The funding goes to acquiring school sites, constructing new school facilities, and modernizing existing school facilities. SB 50 establishes a process for determining the amount of fees developers would be charged to mitigate the impact of development on school districts from increased enrollment. According to Section 65996 of the California Government Code, development fees authorized by SB 50 are deemed to be "full and complete school facilities mitigation."

Under this legislation, there are three levels of developer fees that may be imposed upon new development by the governing school district. Level I fees are assessed based upon the proposed square footage of residential, commercial/industrial, and/or parking structure uses. Level II fees require the developer to provide one-half of the costs of accommodating students in new schools, and the state provides the remaining half. To qualify for Level II fees, the governing board of the school district must adopt a School Facilities Needs Analysis and meet other prerequisites in accordance with Section 65995.6 of the California Government Code. Level III fees apply if the state runs out of bond funds, allowing the governing school district to impose 100 percent of the cost of school facility or mitigation minus any local dedicated school monies on the developer.

Local

Moorpark Unified School District School Impact Fees

Pursuant to SB 50, Moorpark Unified School District (MUSD) has the authority to charge development impact fees. Revenue generated from these impact fees would be used to accommodate the student population generated from the new development projects by expanding and improving school facilities. Table 5.15-7, *Moorpark Unified School District School Impact Fees*, shows MUSD's current school impact fees (MUSD 2022).

Table 5.15-7 Moorpark Unified School District School Impact Fees

Development Type	Impact Fee per Square Foot
Single Family Residential	$4.91
Multifamily Residential	$6.21
Retail and Services	$0.754
Office	$1.178
Research and Development	$1.024
Industrial/Warehouse/Manufacturing	$0.908
Hospital	$0.936
Hotel/Motel	$0.382
Self-Storage	$0.022

Source: MUSD 2022.

Existing Conditions

MUSD provides public schools services to residents in Moorpark and unincorporated areas of Ventura County. MUSD operates 10 schools—5 TK-5 elementary schools, 2 comprehensive middle schools, a transitional-kindergarten to 8th-grade (TK-8), school a comprehensive high school, and an alternative high school. MUSD also has four preschool programs at three of the five elementary schools and the TK-8 school, and an adult education program at Chaparral Middle School. Figure 5.15-3, *Existing School Facilities*, identifies MUSD school locations as well as private schools and charter schools in the city.

Table 5.15-8, *Existing Capacity in MUSD*, lists existing public schools and their associated enrollments and operating capacities as of the 2018-19 school year. As shown in the table, total MUSD enrollment in the 2018-19 school year was 6,174, which is approximately 61 percent of total capacity for the District. Additionally, total enrollment in recent years has been relatively steady. School facilities under MUSD are also available for public use through a permitting process and for a fee. Each facility request is reviewed and requires approval by the MUSD administration.

Table 5.15-8 Existing Capacity in MUSD

School and Location	Enrollment (2021-22)	Operating Capacity	Percentage of Capacity
Elementary Schools			
Arroyo West Active Learning Academy 4117 Country Hill Rd., Moorpark, CA 93021	421	536	79%
Flory Academy of Sciences & Technology 240 Flory Avenue, Moorpark, CA 93021	411	524	78%
Mountain Meadows 21st Century Learning Academy 4200 Mountain Meadow Drive, Moorpark, CA 93021	436	536	81%
Peach Hill Academy 13400 Christian Barrett Drive, Moorpark, CA 93021	440	475	93%

Table 5.15-8 Existing Capacity in MUSD

School and Location	Enrollment (2021-22)	Operating Capacity	Percentage of Capacity
Walnut Canyon School 280 Casey Road, Moorpark, CA 93021	416	450	92%
Campus Canyon College Preparatory Academy 15300 Monroe Avenue, Moorpark, CA 93021	431	475	91%
Elementary Subtotal	2,555	2,996	85%
Middle School			
Chaparral Middle School 280 Poindexter Avenue, Moorpark, CA 93021	564	1,008	56%
Mesa Verde Middle School 14000 Peach Hill Road, Moorpark, CA 93021	587	891	66%
Campus Canyon College Preparatory Academy 15300 Monroe Avenue, Moorpark, CA 93021	136	182	75%
Middle School Subtotal	1,287	2,081	62%
High School			
Moorpark High School 4500 Tierra Rejada Road, Moorpark, CA 93021	1,827	2,349	78%
High School at Moorpark College[1] 7075 Campus Road, Moorpark, CA 93021	100	81	125%
High School Subtotal	1,927	2,430	79%
TOTAL	**5,769**	**7,507**	**77%**

Sources: CDE 2022; MUSD 2022; Moorpark 2020.
[1] High School at Moorpark is a high school program at a college campus that allows students to earn dual credit from college coursework while earning a high school diploma. Currently, the High School at Moorpark College is open for students in the 9th, 10th, 11th, and 12th grades.

5.15.3.2 THRESHOLDS OF SIGNIFICANCE

According to Appendix G of the CEQA Guidelines, a project would normally have a significant effect on the environment if the project would:

SS-1 Result in a substantial adverse physical impact associated with the provisions 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 school services.

5.15.3.3 ENVIRONMENTAL IMPACTS

The applicable thresholds are identified in brackets after the impact statement.

Impact 5.15-3: Buildout of the Moorpark General Plan 2050 would generate new students in the Moorpark Unified School District service area, but payment of SB 50 fees would fully mitigate potential impacts to school facilities. [Threshold SS-1]

Implementation of the proposed Moorpark General Plan 2050 would result in the development of additional dwelling units and an increase in population, resulting in an increase in student population in the city, which is served by MUSD.

School districts use district-specific rates to project the number of students that will be generated by new residential development so they can plan for future facilities expansions or constructions (see Table 5.15-8). Table 5.15-9, *Moorpark General Plan 2050 Buildout Student Generation*, estimates the number of students generated in the city at buildout. As shown in the table, buildout of the Moorpark General Plan 2050 would generate up to 2,408 elementary students, 1,435 middle school students, and 1,927 high school students.

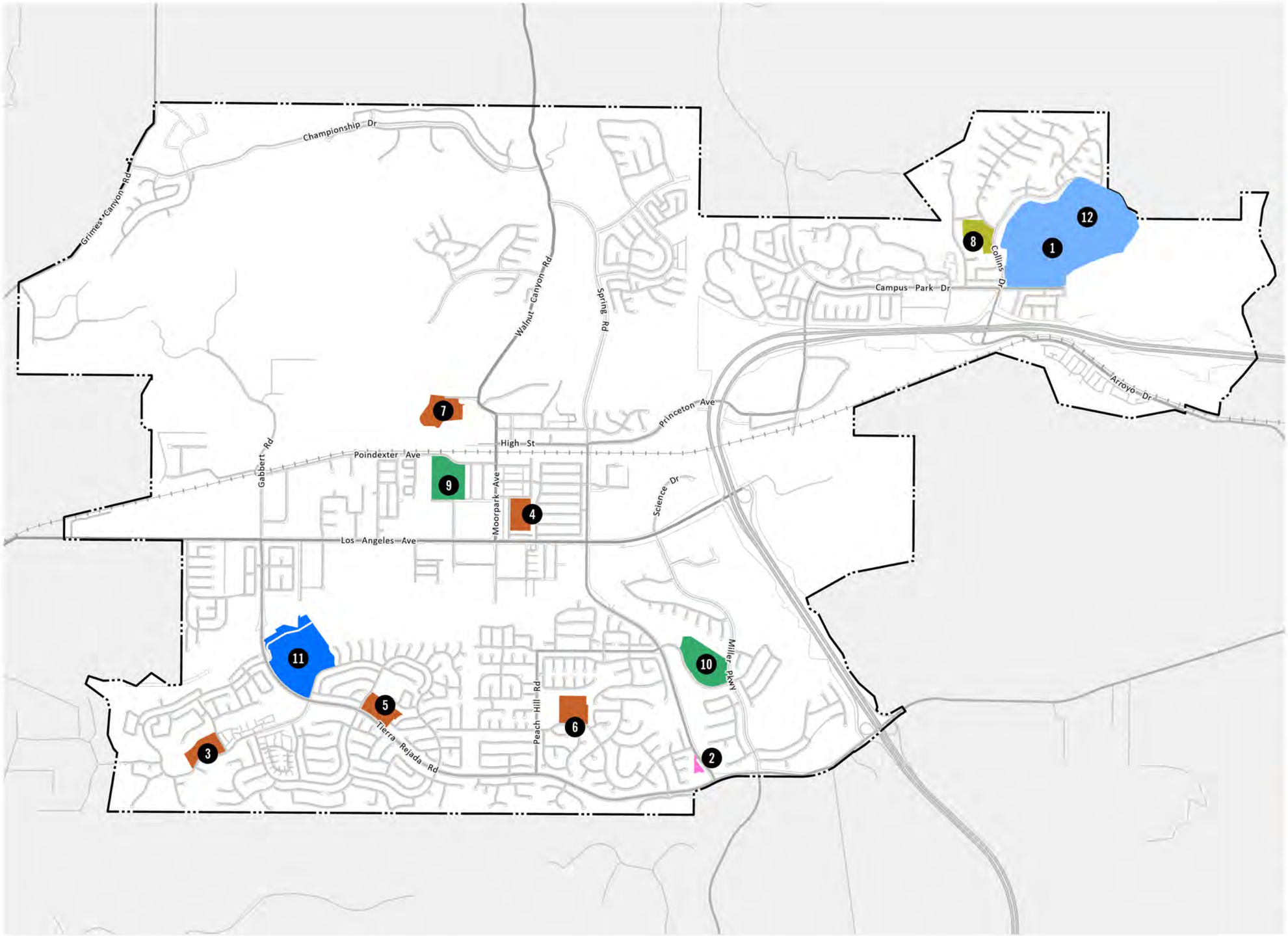
Table 5.15-9 Moorpark General Plan 2050 Buildout Student Generation

School Type	Blended Student Generation Factor[1]	New Students	2021/2022 Enrollment	Current Enrollment + New	2021/2022 Capacity[1]	Remaining Capacity
ES	0.2182	1,198	2,408	3,606	2,996	-610
MS	0.1076	591	1,435	2,026	2,081	55
HS	0.1554	853	1,927	2,780	2,430	-350
Total	NA	2,642	5,769	8,421	7,507	-914

Source: MUSD 2022
Notes: ES = Elementary Schools; MS=Middle School; HS=High School; SF = Single-Family; MF= Multifamily; NA = not applicable
[1] Based on the student generation rates and enrollment and capacity provided by the MUSD (MUSD 2022).

The city is served by five elementary schools, one K-8 school, two middle schools, and two high schools, and these existing schools could likely serve these new students because nearly all schools in MUSD have available operating capacity (see Table 5.15-8). However, as shown in Table 5.15-9, by buildout of the Moorpark General Plan 2050, new school facilities would be required to address shortfalls in capacity.

Figure 5.15-3
School Facilities



City Boundary

School Type

- Moorpark College
- Public High School
- Public Middle School
- Public K-8 School
- Public Elementary School
- Private School

Name

1- Moorpark College
2 - Moorpark KinderCare
3 - Arroyo West Active Learning Academy
4 - Flory Academy of Sciences & Technology
5 - Mountain Meadows 21st Century Learning Academy
6 - Peach Hill Academy
7 - Walnut Canyon School
8 - Campus Canyon College Preparatory Academy
9 - Chaparral Middle School
10 - Mesa Verde Middle School
11 - Moorpark High School
12 - High School at Moorpark College

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Source: PlaceWorks, 2022

Date: 9/29/2022

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If and when MUSD needs to expand and construct new facilities to accommodate the growth generated by buildout of the Moorpark General Plan 2050, funding for new schools would be obtained from the fee program pursuant to SB 50, and state and federal funding programs. Pursuant to Section 65996 of the Government Code, payment of school fees is deemed to provide full and complete school facilities mitigation. At the general plan level of analysis, it is speculative and infeasible to evaluate project-specific environmental impacts associated with the specific construction of future school facilities since specific sites and time frames for development are unknown. When specific projects are necessary to meet the growth demands from buildout of the proposed project, the appropriate level of analysis required under CEQA would be conducted by the MUSD. Furthermore, policies in the Land Use Element would ensure adequate school services, including Policies LU-4.3, LU-10.7, and LU-17.2. Therefore, buildout of the proposed Moorpark General Plan 2050 would result in a less-than-significant impact related to schools.

Level of Significance Before Mitigation: Less than significant impact.

5.15.3.4 RELEVANT GENERAL PLAN POLICIES

Land Use Element

- **Policy LU-4.3 Residential neighborhoods.** Maintain a development pattern of distinct residential neighborhoods oriented around parks, schools, and community facilities that are connected with neighborhood-serving businesses and public transit.
- **Policy LU-10.7 Educational partnerships.** Collaborate with local schools in areas of opportunity, including school transit, health and safety, academic performance, and educational outcomes.
- **Policy LU-17.2 Efficient development.** Promote the co-location of parks, schools, libraries, health services, recreation facilities, and other community facilities to support resident needs and leverage limited resources.
- **Policy LU-17.3 Maintenance and enhancement.** Coordinate, partner with, and encourage school and utility districts and other government and independent agencies that may be exempt from City land use control and approval to plan and improve their properties and design improvements to achieve a high level of visual and architectural quality that maintains the character of the neighborhood or district in which they are located.

Circulation Element

- **Policy CI-5.9 Partnerships with schools.** Develop partnerships with local schools to identify and implement mobility improvements and non-infrastructure programs that improve safety for students traveling to/from school and increase the number of students walking and bicycling to school.

Economic Development Element

- **Policy ED-2.3 Economic development partners.** Leverage investments by the federal and state government and by private and non-profit entities, by collaborating with economic development partners,

including but not limited to the Economic Development Collaborative, the Ventura County Economic Development Corporation Small Business Development Center, Ventura County Workforce Development Board, and other public agencies, Moorpark Chamber of Commerce, Moorpark College, and Moorpark Unified School District, and other stakeholders, including but not limited to existing businesses, real estate brokers and developers, and other community organizations.

Open Space, Parks, and Recreation Element

- **Policy OSPR-2.3 Shared use agreements.** Encourage the development and maintenance of shared-use agreements with schools that allow their properties to be used safely and securely during non-school hours for park, recreational, and educational needs.
- **Policy OSPR-2.4 Recreation partnerships.** Support partnerships with local nonprofits (e.g., YMCA, Boys and Girls Club, and other local groups), local school district, and other agencies that provide healthful, educational, and recreational activities.

5.15.3.5 LEVEL OF SIGNIFICANCE BEFORE MITIGATION

Upon implementation of regulatory requirements and standard conditions of approval, the following impacts would be less than significant: 5.15-3.

5.15.3.6 MITIGATION MEASURES

No significant adverse impacts were identified, and no mitigation measures are necessary.

5.15.3.7 LEVEL OF SIGNIFICANCE AFTER MITIGATION

No mitigation measures are required, and impacts would be less than significant.

5.15.4 Library

5.15.4.1 ENVIRONMENTAL SETTING

Regulatory Background

Local

Moorpark Municipal Code

Library Facilities Fee

Chapter 3.36.210 of the municipal code establishes development impact fees for new developments citywide. Table 5.15-10, *Library Facilities Development Impact Fees*, shows the development impact fees by development type.

Table 5.15-10 Library Facilities Development Impact Fees

Library Protection Area	Single Family Dwelling	Multifamily Dwelling	Mobile Home Dwelling	Commercial Use	Industrial Use
	Per dwelling unit			Per sq. ft. gross floor area	
Citywide	$925.68	$596.91	$612.06	$0.37	$0.37

Source: Moorpark 2022.

Existing Conditions

Since 2007, the Moorpark City Library has provided library services for Moorpark residents at 699 Moorpark Avenue (see Figure 5.15-1). The library is open seven days per week and is operated by Library Systems and Services LLC. The library offers reference and information services; programs for preschool, youth, teens, and adults; books and media for checkout; online databases; and e-books and e-audiobooks. The existing library is 7,092 square feet. The library provides traditional library resources, including books, periodicals, media, and electronic resources. In addition, the library has access to the resources of a consortium of Library Systems and Services client libraries, including Riverside County and other regional libraries. The Moorpark City Library provides public use computers and printers, access to high-speed internet, and wide variety of educational, cultural, and entertainment programs. The Friends of the Library offer used books for sale. The library is heavily used by teens and K-12 children, with popular children's story times and summer reading programs (Sandifer 2022).

As of June 2018, the library had 7.5 full-time equivalent employees serving a total of 12,500 registered users, which represents approximately 34 percent of the city's population (based on an estimated 2018 population of 37,044) (Moorpark 2020). As shown on the California State Library Public Statistics report, in 2018 to 2019, the Moorpark City Library recorded a total of 76,134 library visits with an annual circulation rate of 100,728. From 2010 to 2019, library visits per capita decreased from 4.49 to 2.06 (CSL 2022). This corresponds with national trends that show reductions in reported use of physical library facilities (PRCS 2016).

Collections

As of June 30, 2018, the Moorpark City Library had a total collection of 71,301 items, which includes printed and electronic books, magazines, periodicals, business materials, reference documents, and audio and video materials (see Table 5.15-11, *Moorpark City Library Collections*).

Table 5.15-11 Moorpark City Library Collections

Type	Amount
Children Books[1]	17,458
Young Adult Books[1]	4,748
Other Books	17,189
Total Number of Books	**39,395**
Electronic Books	931
Physical Audio Materials	2,113
Physical Video Materials	161
Downloadable Video Materials	5,915
Downloadable Audio Materials	22,786
Total Collection	**71,301**

Source: Moorpark 2020.
[1] Includes cataloged and uncataloged print materials (number of items, not number of titles). Does not include serials, periodicals, or other formats.

Services

The Moorpark City Library offers a number of services for its users. Computer services include an online catalog to search the collection or check account status and free internet and technology access. The library has 16 public computers, 2 laptops, 2 homework stations, and wireless printing. Printing and copying services are also available at the library for a fee. The Moorpark City Library is part of the Inland Library Network, and all library patrons have access to over 2.5 million materials from more than 40 libraries in the Network (LS&S 2018).

5.15.4.2 THRESHOLDS OF SIGNIFICANCE

According to Appendix G of the CEQA Guidelines, a project would normally have a significant effect on the environment if the project would:

LS-1 Result in a substantial adverse physical impact associated with the provisions 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 library services.

5.15.4.3 ENVIRONMENTAL IMPACTS

The applicable thresholds are identified in brackets after the impact statement.

Impact 5.15-4: Buildout of the Moorpark General Plan 2050 would generate additional population growth but would not impact library facilities or services in Moorpark. [Threshold LS-1]

Buildout of the Moorpark General Plan 2050 would result in an increase in population and demand for library services. Although the proposed project would result in up to 17,336 additional residents, this does not necessarily mean that there would be a significant demand for more library collection items or facility space.

As described by Moorpark City Library personnel, the library is approximately 7,900 square feet and has a collection holding of 34,000, which is far below the benchmark for peer jurisdictions. Statewide, jurisdictions serving similarly sized populations average approximately. 36,000 square feet within single main libraries, such as: Menlo Park (34,046 square feet), Burlingame (47,000 square feet), Monrovia (28,000 square feet), Beverly Hills (72,500 square feet), Palm Springs (34,100 square feet) and Covina (20,144 square feet) (Sandifer 2022).

Based on current populations in Moorpark, Moorpark currently has 0.49 square foot per capita and a 0.5 square foot per capita goal. The California statewide average is 0.43 square foot per capita, with newer branch libraries being planned at 0.65 to 0.75 square foot per capita and new main libraries at 0.75 to 1.25 square feet per capita. As the population of Moorpark continues to grow, the 0.49 square foot per capita will drop. Statewide, the number of print materials held in public libraries totals 1.36 items per capita. The Moorpark Library is planned to house 1.58 items per capita, including nonprint media. The number of e-books, which typically can exceed the number of print books held, does not factor into the facility planning (Sandifer 2022).

The City is currently working on a project to construct a new 18,000-square-foot library on its Civic Center site. In addition to the 18,000-square-foot facility, the library will also include a 2,450-square-foot reading patio at the front entrance, a 1,150-square-foot teen and adult outdoor program area, and a 1,230-square-foot children's exterior program area. These outdoor spaces would be fully covered to shield them from the sun and other elements. This project is funded with developer fees, grants, and donations (Sandifer 2022). Therefore, the construction of the new library would ensure that the potential population growth within the city as a result of the Moorpark General Plan 2050 would still allow the Moorpark Library to meet their goal of 0.5 square foot per capita.

Funding for library services comes primarily from the City's General Fund and development impact fees as well as library fines; fees collected from patrons; and state, federal, or local government aid. As development occurs, the General Fund should grow proportionally with the property tax collections. Additionally, access to online resources, including e-books and audiobooks, are available on the Moorpark Library. Policies in the Land Use Element of the Moorpark General Plan 2050, including Policy LU-9.18, would ensure adequate library services. Therefore, impacts would be less than significant.

Level of Significance Before Mitigation: Less than significant impact.

5.15.4.4 RELEVANT GENERAL PLAN POLICIES

Land Use Element

- **Policy LU-9.18 Library and lifelong learning.** Provide and promote a state-of-the-art library that offers resources and engaging programs to meet the varied educational, cultural, civic, and general business needs of all residents and support opportunities for lifelong learning and enrichment.

5.15.4.5 LEVEL OF SIGNIFICANCE BEFORE MITIGATION

Upon implementation of regulatory requirements and standard conditions of approval, the following impacts would be less than significant: 5.15-4.

5.15.4.6 MITIGATION MEASURES

No significant adverse impacts were identified, and no mitigation measures are necessary.

5.15.4.7 LEVEL OF SIGNIFICANCE AFTER MITIGATION

No mitigation measures are required, and impacts would be less than significant.

5.15.5 References

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5.16 RECREATION

This section of the Draft Environmental Impact Report (DEIR) evaluates the potential for implementation of the Moorpark General Plan 2050 (proposed project) to impact recreation in the City of Moorpark.

5.16.1 Environmental Setting

5.16.1.1 REGULATORY BACKGROUND

State Regulations

Quimby Act

The Quimby Act was established by the California Legislature in 1965 to provide parks for the growing communities in California. The act authorizes cities to adopt ordinances addressing parkland and/or fees for residential subdivisions for the purpose of providing and preserving open space and recreational facilities and improvements, and requires the provision of three acres of park area per 1,000 persons residing in a subdivision unless the existing neighborhood and community park area exceeds that limit, in which case the city may adopt a higher standard not to exceed five acres per 1,000 residents. The Quimby Act also specifies acceptable uses and expenditures of such funds

Mitigation Fee Act

The California Mitigation Fee Act (Government Code Sections 66000 et seq.) allows cities to establish fees that will be imposed upon development projects for the purpose of mitigating the impact that development projects have on city's ability to provide public facilities. In order to comply with the Mitigation Fee Act, the City must follow four primary requirements: 1) Make certain determinations regarding the purpose and use of a fee and establish a nexus or connection between a development project or class of project and the public improvement being financed with the fee; 2) Segregate fee revenue from the General Fund in order to avoid commingling of capital facilities fees and general funds; 3) Make findings each fiscal year describing the continuing need for fees that have been in the possession of the City for five years or more and that have not been spent or committed to a project; and 4) Refund any fees with interest for developer deposits for which the findings noted above cannot be made.

California Public Park Preservation Act

The primary instrument for protecting and preserving parkland is California's Public Park Preservation Act of 1971. Under the Public Resources Code, cities and counties may not acquire any real property that is in use as a public park for any nonpark use unless compensation, land, or both are provided to replace the parkland acquired. This provides for no net loss of parkland and facilities.

Local Regulations

City of Moorpark Parks and Recreation Master Plan

Moorpark's Parks and Recreation Master Plan was adopted in 2009 and is based on the vision that recreation facilities, programs, and open space are valuable resources for any city. The City is in the process of updating the 2009 Park and Recreation Master Plan. The 2009 Master Plan examined the existing condition of parks and facilities at the time of its preparation and established policies and guidelines for park planning and development, including proposed locations for future parks and recommendations for improvements to existing facilities and programs. The following summarizes recommendations and associated action items identified in the Parks Master Plan (not inclusive of all action items):

- Provide facilities that meet the recreation needs and address the community's desire to participate in recreational opportunities. Associated action items include (but are not limited to): develop lighted sports fields/courts; upgrade facility conditions; explore a teen center.
- Provide facilities for organized and individual sports activities as well as active recreation pursuits. Associated action items include (but are not limited to): complete the Trails Master Plan update; pursue the development of a sports complex, an aquatic center, and splash pads.
- Provide parks and recreation facilities that are well maintained and aesthetically pleasing. Associated action items include (but are not limited to): develop a maintenance and management schedule; evaluate and update facilities for universal accessibility; research park ranger programs.
- Provide Community Parks with adequate range of amenities, including base facilities, support facilities, and optional facilities.
- Provide Neighborhood Parks with adequate range of amenities, including base facilities, support facilities, and optional facilities.
- Continue to provide a comprehensive citywide recreation program. Associated action items include (but are not limited to): develop intergenerational programs; family programs; life skills and wellness programs.
- Build and maintain community partnerships with the school district, community college, other City departments, local nonprofit organizations, and businesses. Associated action items include (but are not limited to): coordinate community initiatives and programming; look for opportunities to develop joint-use agreements; conduct a Youth Master Plan.
- Continue to develop and support volunteer programs in the community. Associated action items include (but are not limited to): continue supporting community-led efforts; provide volunteers with leadership training; publicly recognize community volunteers and efforts.

- Communicate the City's goal and solicit feedback regularly from the community. Associated action items include (but are not limited to): provide annual town hall meetings, focus groups, surveys, and other ways for the community to discuss recreation and programming needs.
- Provide the community with a well-trained, effective staff and ensure adequate staffing levels are maintained to provide the very best service for the community. Associated action items include (but are not limited to): establish an intern program; staff training; utilize consultants when most efficient for fast delivery of services to the community.
- Consider the possibility of establishing a community foundation to benefit all aspects for the community. Associated action items include (but are not limited to): explore the feasibility of a bond measure; expand funding for scholarship programs; pursue state and federal grant funding.
- Implement an Asset Management Program to generate revenue from use of assets to offset maintenance and operation costs. Associated action items include (but are not limited to): facility rentals; leases for private concessions; advertising/vending/sponsorship opportunities.
- Study the feasibility of increasing funding for park development and improvement. Associated action items include (but are not limited to): ballot measure to increase park tax assessment; evaluate current park in-lieu fee schedule.

Arroyo Simi Trail Feasibility Study

The Arroyo Simi Trail Feasibility Study, conducted in 2003, analyzed potential routes for a multiuse trail system that could accommodate pedestrian and bicycle mobility along the Arroyo Simi corridor. The study looked at ways the multiuse trail system could support alternative forms of transportation and recreational opportunities. The study involved the engagement of multiple jurisdictions, key stakeholders, and public input and resulted in multiple trail alignment options recommendations for implementation and funding. The two primary funding sources identified include: 1) private development fees, and 2) public funding programs.

Parkland Dedication and In-Lieu Fees

The City of Moorpark Municipal Code, Chapter 16.44, Public Parkland Dedication and/or Fees, provides for the means to finance adequate infrastructure and other public improvements and facilities made necessary by the impacts created by new residential subdivisions.

5.16.1.2 EXISTING CONDITIONS

Park Facilities

The City of Moorpark has a wide variety of parks and recreational facilities—11 neighborhood parks, 7 mini parks, 1 community park, 3 City-owned community facilities, and 1 independently operated community facility (High Street Arts Center). Figure 5.16-1, *Recreation Facilities,* and Figure 5.16-2, *Park Access*, show the location of existing community facilities (community centers, trails, and designated open spaces) in Moorpark. The figures show the Arroyo Vista Community Park as a large, centrally located facility, and mini

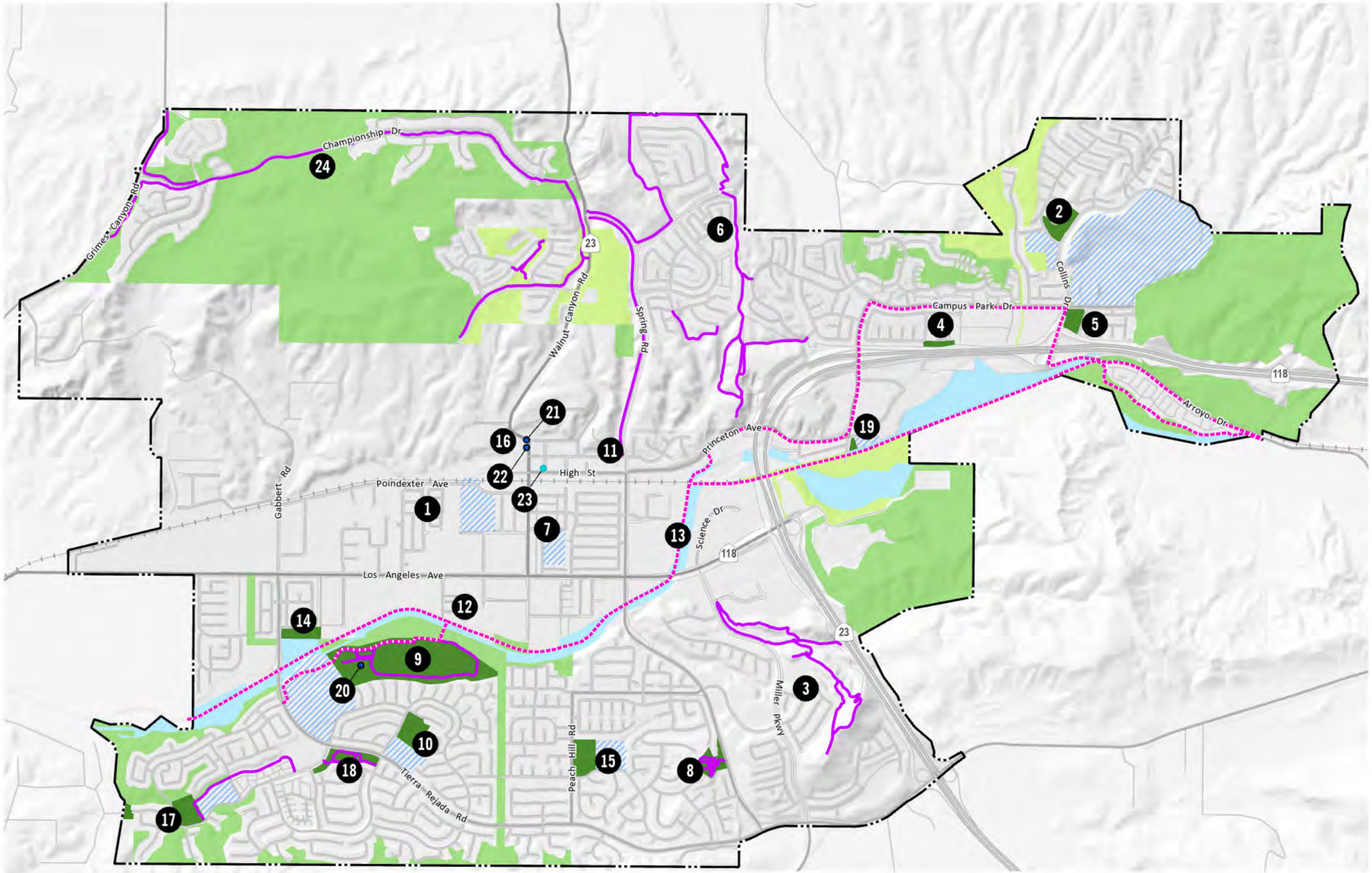
parks are dispersed throughout the remainder of the city, with the more densely developed areas within walking distance of a park. Table 5.16-1, *Parkland in Moorpark*, summarizes parkland in the city.

Table 5.16-1 Parkland in Moorpark

Facility Name	Description	Acreage
Poindexter Park	Barbeques, Basketball Court, Horseshoe Pits, Multi-Purpose Fields, Picnic Pavilion, Skatepark, and Tot Lot	9.8
Campus Canyon Park	Ball Fields, Barbeques, Basketball Court, Multi-purpose Fields, Playground, and Restrooms	6
Miller Park	Barbeques, Basketball Court, Pickleball Courts, Picnic Pavilion, Playground, and Restrooms	6.5
Campus Park	Barbeques, Basketball Court, Playground, and Restrooms	2.5
College View Park (and Dog Park)	Barbeques, Basketball Court, Multi-purpose Fields, Playground, and Restrooms	4
Mammoth Highlands Park	Mammoth Sculpture for Kids and Picnic Pavilion	6.5
Walnut Acres Park	Barbeques, Picnic Tables, Pinata Pole, and Playground	0.5
Monte Vista Nature Park	Hiking Trails	5
Arroyo Vista Community Park	Athletic Fields, Ball Fields, Barbecues, Disc Golf, Football Field, Gymnasium, Multipurpose Fields, Parking, Pet Waste Disposal Stations, Picnic Pavilion, Picnic Tables, Playground, Recycle Bin, Restrooms, Tennis Court, Tot Lot, Trash Receptacles, and Water	69
Mountain Meadows Park	Ball Fields, Barbeques, Basketball Court, Multi-purpose Fields, Picnic Pavilion, and Restrooms	8
Magnolia Park	Picnic Tables and Playground	0.33
Villa Campensina Park	Barbeques and Multi-Purpose Fields	0.5
Veterans Memorial Park	Not Available.	0.3
Glenwood Park	Barbeques, Basketball Court, Multi-Purpose Fields, and Volleyball	4.5
Peach Hill Park	Ball Fields, Barbeques, Multi-Purpose Fields, Picnic Pavilion, Playground, and Restrooms	10
Community Center Park	Picnic Tables and Playground	4.5
County Trail Park	Barbeques, Multi-Purpose Fields, and Playground	8
Tierra Rejada Park	Barbeques, Basketball Court, Bocce Ball Courts, Multi-Purpose Fields, Pickleball Courts, Picnic Pavilion, Playground, Restrooms, Tennis Court, and Tot Lot	8
Virginia Colony Park	Barbeques, Picnic Tables, and Playground	1
Moorpark Country Club	Private Golf Course	436.6
Subtotal		**592**
Happy Camp Canyon Regional Park	Not Available.	3,000

Source: Moorpark 2022b.

Figure 5.16-1
Recreational Facilities



1. Poindexter Park
2. Campus Canyon Park
3. Miller Park
4. Campus Park
5. College View Park
6. Mammoth Highlands Park
7. Walnut Acres Park
8. Monte Vista Nature Park
9. Arroyo Vista Community Park
10. Mountain Meadows Park
11. Magnolia Park
12. Villa Campesina Park
13. Veterans Memorial Park
14. Glenwood Park
15. Peach Hill Park
16. Community Center Park
17. Country Trail Park
18. Tierra Rejada Park
19. Virginia Colony Park
20. Arroyo Vista Community Center
21. Moorpark Active Adult Center
22. Moorpark Community Center
23. High Street Arts Center
24. Moorpark Country Club

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Source: PlaceWorks, 2022

Date: 10/26/2022

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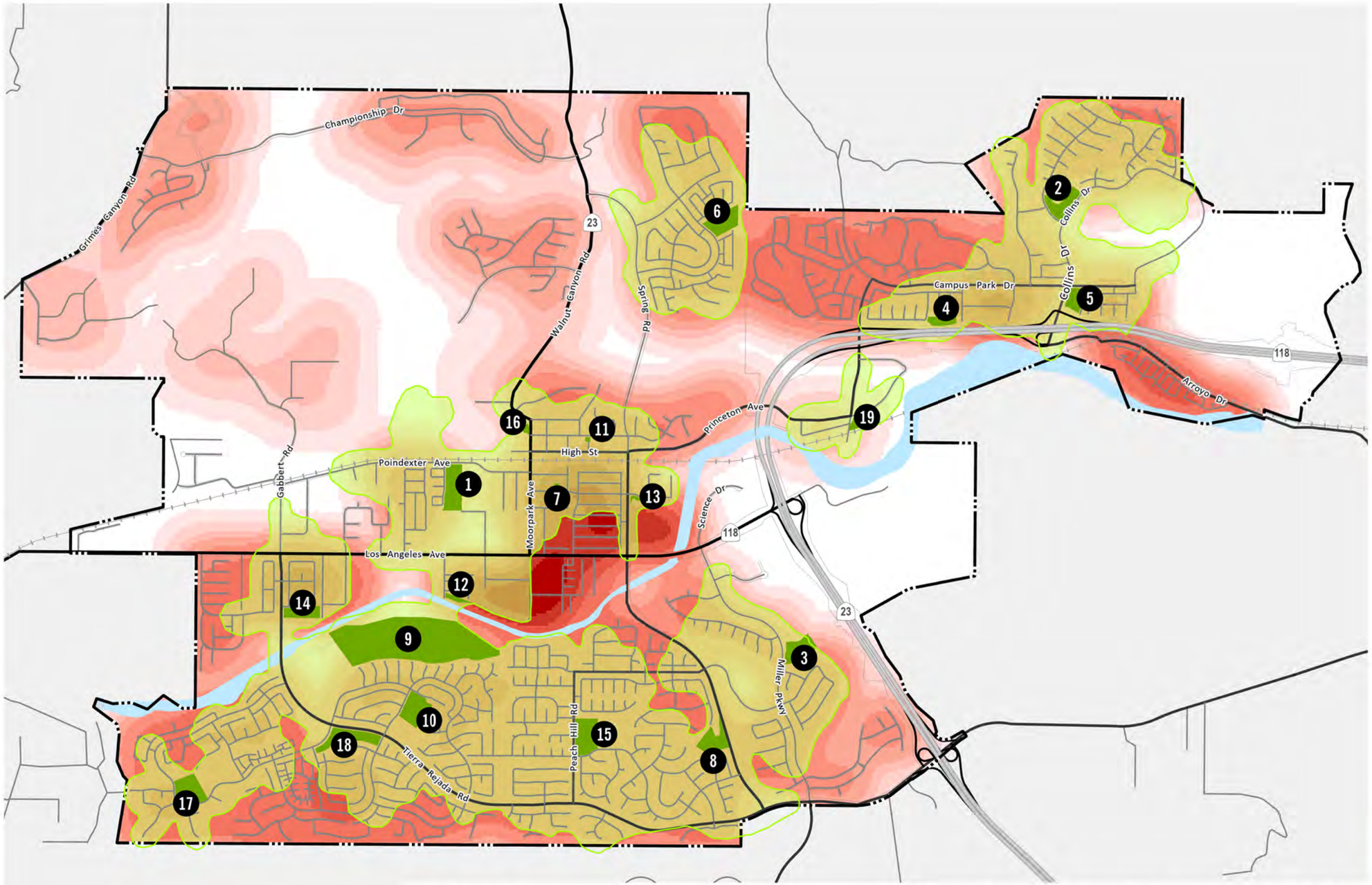
Figure 5.16-2
Park Access



Within Walking Distance to a Park
City Boundary
Arroyo Wash
Parks

Population Density/Square Mile
- 10-100
- 101-500
- 501-1000
- 1001-2000
- 2001-4000
- 4001-8000
- 8001-12000
- 12001-18000
- 18001-25000

1. Poindexter Park
2. Campus Canyon Park
3. Miller Park
4. Campus Park
5. College View Park
6. Mammoth Highlands Park
7. Walnut Acres Park
8. Monte Vista Natural Park
9. Arroyo Vista Community Park
10. Mountain Meadows Park
11. Magnolia Park
12. Villa Campesina Park
13. Veterans Memorial Park
14. Glenwood Park
15. Peach Hill Park
16. Community Center Park
17. Country Trail Park
18. Tierra Rejada Park
19. Virginia Colony Park

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Source: PlaceWorks, 2022

Date: 9/29/2022

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Table 5.16-2, *Park Classifications,* describes classifications for parks in the city.

Table 5.16-2 Park Classifications

Park Classification	Description	Service Area
Mini Park	Includes very small recreation areas like tot lots, pocket parks, and playgrounds. These parks are limited in size and the types of amenities that can be provided.	0.25 mile
Neighborhood Park	Small to midsized parks that strive to provide amenities that meet a wide variety of needs. May include playgrounds, picnic areas, basketball courts, and sports fields.	0.50 mile
Community Park	Designed to provide active recreation and structured activities. Typically offers a wide range of amenities including a central focus like a sports field.	2–3 miles
Community Facilities and Programs	Includes indoor recreation facilities such as recreation centers, youth centers, adult centers	Citywide
Natural Open Space	Undeveloped land in its natural form with recreation uses as a secondary objective. May include wetlands or steep hillsides and may include wildlife habitats or unique plant species.	Varies
Linear Parks[1]	Corridors such as rivers, creeks, railroad rights-of-way, canals, and power lines that can provide seating areas, trails, and in some cases fitness zones and dog walking stations.	Varies

[1] There are currently no linear parks in Moorpark, but the completion of the Arroyo Simi Trail would fill this gap.

Community Facilities and Programs

The City of Moorpark currently provides approximately 40,000 square feet of community space in three facilities, shown on Figure 5.16-1. The Arroyo Vista Recreation Center, Moorpark Civic Community/Active Adult Center, and High Streets Arts Center provide a wide variety of community programs and resources for all ages.

Available programs at the Recreation Center and Active Adult Center include a variety of special interest classes, day camps, preschool, youth and adult sports leagues, health and fitness programs, special interest groups, social support services for seniors, and a senior nutrition program. The High Street Arts Center provides live theater performances, comedy shows, and film screenings. The City also hosts and co-sponsors a variety of community events, including the 3rd of July Fireworks Extravaganza, movies and concerts in the park, special events for various holidays, and a street fair (Moorpark 2022a).

Regional Trails and Open Space

Moorpark is also surrounded by several regional recreational attractions and natural open spaces, including the Happy Camp Canyon Regional Park, Arroyo Conejo Open Space Nature Preserve, Bard Lake, and the Ronald Reagan Presidential Library (see Figure 5.16-3, *Regional Trails and Open Space*).

Open Space

The City of Moorpark currently has 205 acres of OS-1 designated open space and 1,461 acres of OS-2 designated open space, primarily concentrated in the northern and eastern portions of the city. It also has 201 acres of floodway open space; these are a mix of public and private lands that are not developed for active recreational uses but may serve as an informal resource for hiking and passive recreational uses where legally accessible to the public.

Trail Access

Moorpark currently has 14.5 miles of trails within the city and 11.42 miles of proposed trails. As the City explored ways to fund and implement the proposed trails, it identified two potential trail alignments, shown on Figure 5.16-3. Existing trails are heavily concentrated in the northern part of the city and in and around existing parks. The proposed trails would provide connectivity between existing parks in the southern part of the city to parks in the northeastern part of the city. Figure 5.16-3 shows the regional trail system within a five-mile radius outside of Moorpark. This map provides regional context for how the City may be able to connect to the regional network of trails and open spaces, particularly by way of the proposed Arroyo Simi trail project.

5.16.2 Thresholds of Significance

According to Appendix G of the CEQA Guidelines, a project would normally have a significant effect on the environment if the project:

R-1 Would 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.

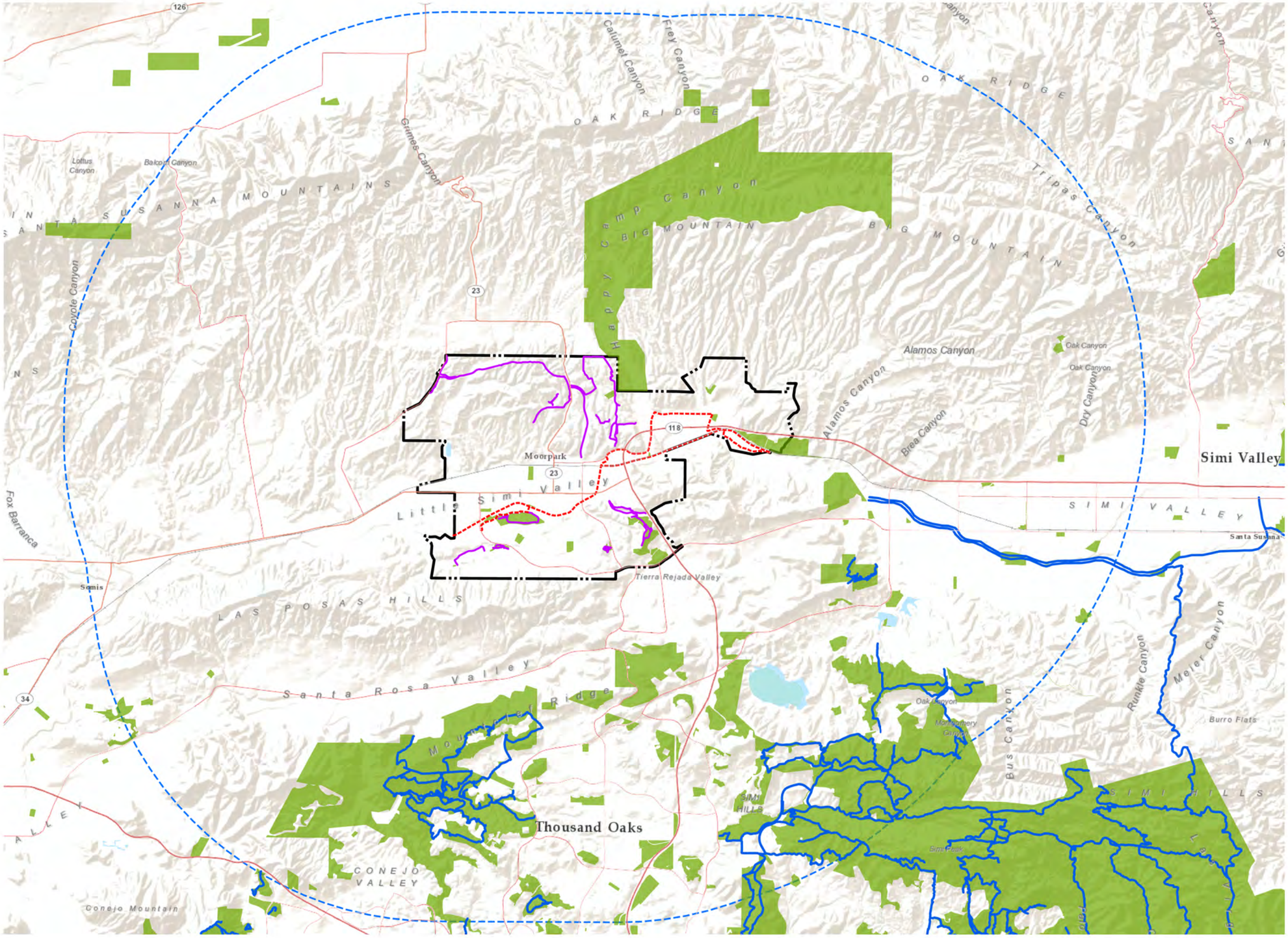
R-2 Includes recreational facilities or requires the construction or expansion of recreational facilities which might have an adverse physical effect on the environment.

5.16.3 Environmental Impacts

5.16.3.1 IMPACT ANALYSIS

The following impact analysis addresses the thresholds of significance, which are identified in brackets after the impact statement.

Figure 5.16-3
Regional Trails and Open Space



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Source: PlaceWorks, 2022

Date: 9/29/2022

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Impact 5.16-1: The proposed project would generate additional residents that would increase the use of existing park and recreational facilities and result in an increase in demand for new parks. [Threshold R-1]

Buildout of the proposed project would allow for the development of up to 17,025 dwelling units, which would result in an estimated population of 53,781 residents. The proposed project would increase the existing population in the city from 36,445 residents to 53,781 residents by buildout. This increase in population would increase the use of existing park and recreational facilities and result in a demand for new parks.

Each jurisdiction determines the appropriate park standard based on the guidance provided by Section 666477 of the California Government Code, commonly referred to as the Quimby Act, which requires a standard of 3 acres of parkland per 1,000 residents. The city's park standard is 5 acres of parkland per 1,000 residents. As shown on Figure 5.16-2, parks and mini parks are in the more densely populated areas of the city around State Route 118, east of Walnut Canyon, and west of Spring Road. Additionally, areas in the northwest corner of the city, which does not include parks and mini-parks, are primarily made up of open space, which would also provide recreational opportunities.

Currently, Moorpark has 155 acres of developed parkland and 592 acres of parkland including private golf courses. This excludes recreational opportunities at schools and Moorpark College. As shown in Table 5.16-3, *Demand for Public Parks in the City at General Plan Buildout*, based on its population of approximately 37,000, there are 16.0 acres of existing park land per 1,000 people (including private golf courses); as a result, the city currently exceeds its standard of 5 acres per 1,000 people. The proposed project would result in an increase in demand for approximately 84 additional acres of parks to accommodate Moorpark's population at buildout. Under the Moorpark General Plan 2050, approximately 1,807 acres would be designated for Neighborhood / Community Park and Open Space. Additional parkland would also be developed within proposed Specific Plans, including a new 6-acre park in Hitch Ranch. The Moorpark Unified School District may also allow for joint-use agreements for use of recreational facilities. Lastly, regional trails through Moorpark provide connection to regional park and open spaces areas in Ventura County, including the Happy Camp Canyon Regional Park (see Figure 5.16-3), which provides 3,000 acres of parkland within and adjacent to the city. As shown on Figure 5.16-1, the proposed project would also increase the number of trails in Moorpark.

Table 5.16-3 Demand for Public Parks in the City at General Plan Buildout

			Existing Demand			Moorpark General Plan 2050 Demand			
	Existing Parkland Acres	Proposed Park Standard (Acres/1,000 People)	Population	Park Demand Acre[3]	Existing Park Ratio (Acres/1,000 People)	Population	Park Demand Acre	Project Park Ratio at Buildout (Acres/1,000 People)[1]	Increase in Demand (Acres)
Without Golf Course	155	5.0	37,000	185	4.2	53,781	269	2.9	84
With Golf Courses	592				16.0			11.0	

Notes: Excludes the Moorpark Country Club and the Happy Camp Canyon Regional Park.
[1] Parkland ratio if no new parks were constructed.

The Moorpark General Plan 2050 includes implementation actions that would be required for any future development and would ensure that the park and recreations standards in the city would continue to be met.

- **Implementation Action OSPR-I1 Parks and Recreation Master Plan** would periodically review and update the City's Parks and Recreation Master Plan to enable attainment of the standard of 5 acres per 1,000 residents, which may include the development of new parklands and/or expansion of existing, equitable distribution and access for all residents, incorporation of recreational facilities for all age levels, and design to meet objectives for sustainable and hazards-free landscapes and landforms. The update should include consideration of new categories of parklands appropriate for inclusion in higher density residential and mixed-use development projects and corresponding funding programs to provide for ongoing maintenance in perpetuity.

- **Implementation Action OSPR-I4 Parkland Acquisition and Development** would implement programs for the financing and/or development of new parklands that may include requirements for developer land dedications in planned residential communities, multifamily apartment and condominium projects, and/or industrial parks and City acquisition and development of vacant properties.

- **Implementation Action OSPR-I6 Development Review and Entitlement** would continue to regulate development for compliance with the policies and standards established by the Open Space, Parks and Recreation Element, including the dedication of land and contribution of impact or in-lieu fees for new parklands, trails, and other open spaces and design of landscape and structures.

- **Implementation Action OSPR-I7 Development Impact Fees** would periodically review and update development fees to ensure that costs for parkland development and maintenance are sufficient to cover costs, to the extent permitted by state laws and nexus requirements.

Furthermore, new development would be required to dedicate parkland or pay an in-lieu fee. The availability of new facilities would prevent the accelerated physical deterioration of existing facilities. Additionally, there are a number of other park and recreational facilities in the city, such as trails, special use and mini parks, recreational programs and amenities, and joint-use school facilities, to serve the proposed residents. Therefore, with dedicated parkland or in-lieu fees as well as the implementation actions included as part of the proposed project, impacts would be less than significant.

Level of Significance Before Mitigation: Less than significant.

Impact 5.16-2: Project implementation would result in environmental impacts to provide new and/or expanded recreational facilities. [Threshold R-2]

Based on the City's population growth and availability of funds, portions of undeveloped land would be improved as parks and recreational facilities to provide residents with new recreational opportunities while meeting the City's parkland standard of 5 acres per 1,000 residents. Parks are also a permitted use under other land use designations (e.g., residential land uses), which could result in the development of additional parkland opportunities outside of park-designated parcels.

Development and operation of future new or expanded parks and recreational facilities may have an adverse physical effect on the environment, including impacts relating to air quality, biological resources, lighting, noise, and traffic. Environmental impacts associated with the construction of new and/or expansions of existing recreational facilities in accordance with the proposed land use plan are addressed separately. Construction-related air quality and noise impacts of the proposed project are described in Section 5.3, *Air Quality,* and Section 5.13, *Noise*. Addressing the site-specific impacts of these parks at this time is beyond the scope of this EIR. Subsequent environmental review for individual park developments would be required. Further, potentially adverse impacts to the environment that may result from the expansion of parks and recreational facilities pursuant to buildout of the proposed land use plan would be less than significant upon the implementation of the Moorpark General Plan 2050 goals and policies, and implementation actions and existing federal, state, and local regulations. Consequently, the proposed Moorpark General Plan 2050 would not result in significant impacts relating to new or expanded recreational facilities and impacts would be less than significant.

Level of Significance Before Mitigation: Less than significant.

5.16.4 Relevant General Plan Policies

Land Use Element

- **Policy LU-1.4 Public services to support growth.** Coordinate new development and redevelopment of existing properties to ensure that the existing and planned capacity of public facilities and services shall not be adversely impacted.

- **Policy LU-3.8 Public services and facilities.** Support a diversity of uses and services supporting Moorpark's residents such as facilities for governance and administration, public safety, seniors and youth, community gatherings, and comparable activities.

- **Policy LU-3.9 Parks, recreation, and open spaces.** Maintain existing parks and recreation facilities, trails, and other open space amenities and develop new parks, facilities, and amenities in areas of need consistent with the provisions of the Open Space, Conservation and Recreation Elements.

- **Policy LU-4.3 Residential neighborhoods.** Maintain a development pattern of distinct residential neighborhoods oriented around parks, schools, and community facilities that are connected with neighborhood-serving businesses and public transit.

- **Policy LU-4.4 Multi-family housing.** Promote the development of multiple-family dwellings in close proximity to employment opportunities, shopping areas, public parks, and transit lines, with careful consideration of the proximity to and compatibility with single-family neighborhoods.

- **Policy LU-5.2 Integration of public spaces.** Maintain public spaces and services to create an aesthetically and functionally welcoming environment.

- **Policy LU-7.4 Open space corridor.** Preserve and enhance the flood control easement area adjacent to the Arroyo Simi floodway as an important natural and scenic feature of the community.
- **Policy LU-7.5 Arroyo Simi corridor recreation.** Encourage the development of compatible open space/recreational uses of the Arroyo Simi floodway that are consistent with the provisions of the Federal Emergency Management Agency for floodway uses.
- **Policy LU-9.2 Active pedestrian environment.** Locate and design new development to foster active pedestrian access and use by such techniques as locating a mix of uses and buildings around common plazas and open spaces to promote outdoor gatherings and walking among businesses, inclusion of bicycle storage facilities, and pedestrian walkways and connections to adjoining residential neighborhoods.
- **Policy LU-9.5 Parks contributing to healthy lives.** Promote opportunities for physical activity for users of all ages and abilities by continuing to improve the quality of existing park and open space facilities and creating recreation programs as defined by the Conservation, Open Space, and Recreation Element.
- **Policy LU-10.1 Access to services and amenities.** Strive to ensure that recreational, health, public service, and other desired services and neighborhood amenities are distributed equitably throughout the city.
- **Policy LU-12.4 Recreation and open space.** Require that new residential development includes adequate public and private open space and recreational uses to serve residential neighborhoods.
- **Policy LU-15.4 Inclusion of recreation and amenities.** Require that residential/commercial mixed-use projects provide on-site recreational areas and other pedestrian-scale amenities such as benches, fountains, and landscaping that contribute to the living environment of residents, or contribute funds for their development within proximity of the project.
- **Policy LU-17.2 Efficient development.** Promote the co-location of parks, schools, libraries, health services, recreation facilities, and other community facilities to support resident needs and leverage limited resources.

Open Space, Parks and Recreation Element; Goals and Policies

- **Policy OSPR-1.1 Park standard.** Provide and maintain recreational/leisure parklands at the standard of 5 acres for every 1,000 residents, with a park located within a 1-mile radius of each of the City's residential neighborhoods. Study whether standards should be adjusted to support new higher-density residential and mixed-use developments.
- **Policy OSPR-1.2 Funding mechanisms.** Use a broad range of funding and economic development tools to ensure high quality development, maintenance, and programming of the City parks and recreation systems.

- **Policy OSPR-1.3 Funding from new development.** Ensure that all residential subdivision, development, or redevelopment pay their fair share of the cost of land acquisition for parks and their fair share of the cost of development and maintenance of new parks, trails, and open space.
- **Policy OSPR-1.4 Park demand.** Acquire and provide parklands in areas where existing demand is the greatest in proportion to population, prioritizing underserved areas.
- **Policy OSPR-1.5 Joint use.** Encourage the joint use of public facilities and access to lands owned by public utilities or public entities for recreational use, as recommended in the Master Plan of Parks and Recreation.
- **Policy OSPR-1.6 Expanded access.** Expand access to parklands for all residents, including the young, handicapped, and elderly.
- **Policy OSPR-1.7 Recreational activities.** Facilitate the development and provision of recreational activities that are both active and passive (e.g., hiking, biking, running, sightseeing, swimming).
- **Policy OSPR-1.8 Master Plan.** Periodically review, update, and adopt the Master Plan of Parks and Recreation to ensure that it reflect current needs and recreational objectives of Moorpark's residents, serving as a guide for the provision and maintenance of parkland.
- **Policy OSPR-1.9 Flood control areas.** Limit the use of areas designated for flood control purposes to passive recreation activities (e.g., hiking, fishing, bike riding), consistent with requirements to maintain the integrity of these areas to protect public safety.
- **Policy OSPR-1.10 Properties unsuitable for development.** Promote the use of the properties unsuitable for development due to hazards or other safety constraints (as defined by the Safety Element) for recreation uses provided that they can be safely integrated and do not require infrastructure (e.g., hiking, fishing, bike riding).
- **Policy OSPR-1.11 Locating and design.** Require that parklands, recreation facilities, and community centers are located and designed to conform and respect their natural environmental setting, are compatible with adjoining uses, and protect users from hazards.
- **Policy OSPR-1.12 Sustainability features.** Require that new parks are designed, and existing parks are retrofitted over time, to incorporate sustainable development and landscape practices that reduce water and energy consumption.
- **Policy OSPR-1.13 Private facilities.** Encourage the development of private commercial recreational facilities to help meet recreational interests of Moorpark's residents, workforce, and visitors.
- **Policy OSPR-1.14 New development.** Allow new development to provide small plazas, pocket parks, civic spaces, and other gathering places that are available to the public, particularly in infill areas, to help meet recreational demands.

- **Policy OSPR-1.15 Park equity.** Prioritize social equity considerations in the provision and design of public parks so that residents regardless of age, ability, or neighborhood where they live have quality active and passive green space.
- **Policy OSPR-2.3 Shared use agreements.** Encourage the development and maintenance of shared-use agreements with schools that allow their properties to be used safely and securely during non-school hours for park, recreational, and educational needs.
- **Policy OSPR-2.4 Recreation partnerships.** Support partnerships with local nonprofits (e.g., YMCA, Boys and Girls Club, and other local groups), local school district, and other agencies that provide healthful, educational, and recreational activities.
- **Policy OSPR-2.5 Youth and teens.** In collaboration with community partners, facilitate and/or the provision of recreation services, programs, and activities that meet the changing needs of youth and teens.
- **Policy OSPR-2.6 Moorpark adults and seniors.** Continue supporting Moorpark adults, including senior citizens, with an array of recreation, health, and social programs tailored to their needs.
- **Policy OSPR-2.7 Parks and Recreation Commission.** Continue the role of the Parks and Recreation Commission as the advisory body for recreation and human services programs, services, and activities within Moorpark.
- **Policy OSPR-3.1 Trail planning.** Develop and adopt a Plan assessing the opportunities for, and guiding the provision and maintenance of, an interconnected network of trails serving Moorpark residents and visitors.
- **Policy OSPR-3.2 Network of trails.** Develop a comprehensive and interconnected network of trails that provides public access to arroyos and creeks, connects residents with open space and nature, and links urban areas with parks and recreational facilities.
- **Policy OSPR-3.3 Regional connection.** Connect Moorpark's trails with those of Thousand Oaks, Simi Valley, and County areas as feasible to establish a continuous regional network consistent with neighboring jurisdictions General Plan and trail plans and with the proposed Moorpark Trails Master Plan.
- **Policy OSPR-3.4 Implementation of Arroyo Simi Trail.** Pursue funding to implement the Arroyo Simi Trail as recommended in the Arroyo Simi Trail Feasibility Study.
- **Policy OSPR-3.5 Nature centers.** Pursue the development of nature observation and interpretative centers, viewpoints, and other amenities along trails to provide an amenity for hikers, cyclists, and other users.

- **Policy OSPR-3.6 Trail Design.** Design trails and pathways to incorporate universal design (ADA) and safety considerations to allow residents of all ages and abilities to safely use trails.
- **Policy OSPR-3.7 Equestrian trails in new development.** Require that new development projects consider the appropriateness of integrating equestrian trail linkages to regional parks and regional trail systems consistent with the multi-use/equestrian trail network).
- **Policy OSPR-3.8 Homeowners Association property.** Encourage the provision of public trails and trail access in coordination with Homeowners Associations on HOA property.
- **Policy OSPR-4.1 Landscape links.** Work with Ventura County to enhance landscaped arterial entrance ways, multi-use trails, including bikeways and equestrian paths connecting to Greenbelt areas, such as Tierra Rejada, and Wildlife Corridors to create a network of aesthetically pleasing links into and around the City.
- **Policy OSPR-4.6 Rewilding Options.** Pursue rewilding opportunities that include, but are not limited to the following: the preserve, enhance and expand an integrated network of open space to support beneficial uses, such as habitat, recreation, natural resources, historic and tribal resources, water management, and aesthetics.
- **Policy OSPR-6.1 Limitations on development.** Maintain open space lands for health and safety by limiting development in areas susceptible to flood, seismic risk, geologic instability, and wildfire, as detailed in the Safety Element.

Conservation Element

- **Policy COS-1.20 Open space acquisition.** Explore acquisition of new open space areas, including privately owned parcels located adjacent to or within recognized critical habitats and wildlife corridors.
- **Policy COS-3.6 Open space resource protection.** Explore acquisition of new open space areas, including privately owned parcels located adjacent to or within recognized historical, cultural, archaeological, and paleontological resources.

5.16.5 Level of Significance Before Mitigation

Upon implementation of regulatory requirements and standard conditions of approval, the following impacts would be less than significant: 5.16-1 and 5.16-2.

5.16.6 Mitigation Measures

No significant adverse impacts were identified, and no mitigation measures are necessary.

5.16.7 Level of Significance After Mitigation

No mitigation measures are required, and impacts would be less than significant.

5.16.8 References

Moorpark, City of. 2022a, October 21 (accessed). Recreation. http://www.moorparkca.gov/199/Recreation.

———. 2022b. City of Moorpark Park Rental Guide. Park Facilities and Amenities. http://www.moorparkca.gov/DocumentCenter/View/4976/Park-Rental-Brochure?bidId=.

5.17 TRANSPORTATION

This section of the Draft Environmental Impact Report (DEIR) evaluates the potential for implementation of the Moorpark General Plan 2050 to result in transportation impacts in Moorpark compared to existing conditions. Under the new CEQA Guidelines, level of service (LOS) metrics may no longer constitute the sole basis for determining transportation impacts under CEQA. The DEIR evaluates the cumulative effect of the Moorpark General Plan 2050 on vehicle miles traveled (VMT) and uses the Ventura County Transportation Commission's (VCTC) Ventura County Transportation Model (VCTM) for the analysis horizon. The analysis in this section is based on the following technical report:

- Moorpark General Plan Update: Draft CEQA Transportation Impact Analysis Iteris. 2022, October 4.

This technical report is included as Appendix K to the DEIR.

Terminology

The following are definitions for terms used throughout this section:

- **Level of Service.** Roadway capacity is generally limited by the ability to move vehicles through intersections. LOS is a standard performance measurement to describe the operating characteristics of a street system in terms of the level of congestion or the delay experienced by motorists. Service levels range from A through F, that is, traffic conditions from best (uncongested, free-flowing conditions) to worst (total breakdown with stop-and-go operation).

- **Vehicles Miles Traveled.** VMT measures the number of trips and the lengths of those trips for the total number of miles that vehicles will travel on a roadway system. It is used to better assess traffic impacts on greenhouse gas emissions, air quality, and energy. The number of miles of vehicle travel is an indicator of the travel levels on the roadway system by motor vehicles.

- **Total VMT.** Total VMT represents all VMT generated in the city on a typical weekday.

- **VMT per Service Population.** Service population counts residents and employees. VMT/SP measures the transportation "efficiency" of a project or plan and is defined as VMT generated on a typical weekday per person who lives and/or works in the city.

5.17.1 Environmental Setting

5.17.1.1 REGULATORY BACKGROUND

State Regulations

Senate Bill 743

On September 27, 2013, Senate Bill (SB) 743 was signed into law, starting a process that fundamentally changed transportation impact analysis as part of CEQA compliance. The legislature found that with the adoption of

the SB 375, the state had signaled its commitment to encourage land use and transportation planning decisions and investments that reduce VMT and thereby contribute to the reduction of greenhouse gas emissions, as required by the California Global Warming Solutions Act of 2006 (Assembly Bill [AB] 32).

SB 743 eliminates auto delay, level of service, and similar measures of vehicular capacity or traffic congestion as the sole basis for determining significant impacts under CEQA. As part of the new CEQA Guidelines, the new criteria "shall promote the reduction of greenhouse gas emissions, the development of multimodal transportation networks, and a diversity of land uses" (Public Resources Code Section 21099(b)(1)).

Pursuant to SB 743, the Natural Resources Agency adopted revisions to the CEQA Guidelines to implement SB 743 on December 28, 2018. The revised CEQA Guidelines establish new criteria for determining the significance of transportation impacts. Under the new Guidelines, VMT-related metric(s) were required beginning July 1, 2020, to evaluate the significance of transportation-related impacts under CEQA for development projects, land use plans, and transportation infrastructure projects. The legislation does not preclude the application of local general plan policies, zoning codes, conditions of approval, or any other planning requirements that require evaluation of LOS, but such metrics may no longer constitute the sole basis for determining transportation impacts under CEQA.

AB 1358: California Complete Streets Act of 2008

The California Complete Streets Act of 2008 was signed into law on September 30, 2008. Beginning January 1, 2011, AB 1358 required circulation elements to address the transportation system from a multimodal perspective. The bill states that streets, roads, and highways must "meet the needs of all users… in a manner suitable to the rural, suburban, or urban context of the general plan." Essentially, this bill requires a circulation element to plan for all modes of transportation where appropriate—including walking, biking, car travel, and transit.

The Complete Streets Act also requires circulation elements to consider the various users of the transportation system, including children, adults, seniors, and the disabled. For further clarity, AB 1358 tasked the Office of Planning and Research to release guidelines for compliance, which it did in December 2010.

SB 375: Sustainable Communities and Climate Protection Act

On December 11, 2008, the California Air Resources Board (CARB) adopted its proposed Scoping Plan for AB 32, the Global Warming Act. This scoping plan included the approval of SB 375 as the means for achieving regional transportation-related GHG targets. SB 375 provides guidance on how curbing emissions from cars and light trucks can help the state comply with AB 32.

There are five major components to SB 375. First, SB 375 addresses regional GHG emission targets. CARB's Regional Targets Advisory Committee guides the adoption of targets to be met by 2020 and 2035 for each metropolitan planning organization (MPO) in the state. These targets, which MPOs may propose themselves, are updated every eight years in conjunction with the revision schedule of housing and transportation elements.

Second, MPOs are required to create a sustainable communities strategy (SCS) that provides a plan for meeting regional targets. The SCS and the regional transportation plan (RTP) must be consistent with each other,

including action items and financing decisions. If the SCS does not meet the regional target, the MPO must produce an Alternative Planning Strategy that details another plan to meet the target.

Third, SB 375 requires that regional housing elements and transportation plans be synchronized on eight-year schedules. In addition, Regional Housing Needs Assessment allocation numbers must conform to the SCS. If local jurisdictions are required to rezone land as a result of changes in the housing element, rezoning must take place within three years.

Fourth, SB 375 provides CEQA streamlining incentives for preferred development types. Residential or mixed-use projects qualify if they conform to the SCS. Transit-oriented developments also qualify if they 1) are at least 50 percent residential, 2) meet density requirements, and 3) are within one-half mile of a transit stop. The degree of CEQA streamlining is based on the degree of compliance with these development preferences.

Finally, MPOs must use transportation and air emission modeling techniques consistent with guidelines prepared by the California Transportation Commission. Regional transportation planning agencies, cities, and counties are encouraged, but not required, to use travel demand models consistent with the commission's guidelines.

Senate Bill 99

SB 99 (Section 65302(g)(5) of the California Government Code) requires jurisdictions to review and update the safety element to include information identifying residential developments in hazard areas that do not have at least two emergency evacuation routes.

Assembly Bill 747

AB 747 added Section 65302.15 to the California Government Code (amended by AB 1409), which went into effect in January 2022. AB 747 requires local governments to identify the capacity, safety, and viability of evacuation routes and locations in their general plan safety element or local hazard mitigation plan.

Regional Regulations

Southern California Association of Governments

The Southern California Association of Governments (SCAG) is a council of governments representing Imperial, Los Angeles, Orange, Riverside, San Bernardino, and Ventura counties. Under federal law, SCAG is designated as an MPO and under state law as a Regional Transportation Planning Agency and a Council of Governments. SCAG's jurisdiction encompasses over 38,000 square miles. SCAG is a regional planning agency and a forum for addressing regional issues concerning transportation, the economy, community development, and the environment. SCAG is also the regional clearinghouse for projects requiring environmental documentation under federal and state law. In this role, SCAG reviews proposed development and infrastructure projects to analyze their impacts on regional planning programs.

2020 Regional Transportation Plan/Sustainable Community Strategy (Connect SoCal)

Every four years SCAG updates the regional transportation plan/sustainable community strategy (RTP/SCS) for its six-county region. On September 3, 2020, SCAG adopted the 2020-2045 RTP/SCS, Connect SoCal, which encompasses four principles that are important to the region's future—mobility, economy, healthy/complete communities, and environment. Connect SoCal explicitly lays out goals related to housing, transportation technologies, equity, and resilience in order to adequately reflect the increasing importance of these topics in the region. It is also used as a transportation planning document that allows project sponsors to qualify for federal funding. It outlines a development pattern for the region which, when integrated with the transportation network and other transportation measures and policies, would reduce greenhouse gas emissions from transportation (excluding good movement). The RTP/SCS is meant to provide growth strategies that would achieve the regional greenhouse gas emissions reduction targets identified by CARB. However, the RTP/SCS does not require that local general plans, specific plans, or zoning be consistent with the RTP/SCS; instead, it provides incentives to governments and developers for consistency. The City coordinates with SCAG to integrate general plan land use and transportation plans in the RTP/SCS.

Ventura County Transportation Commission

Comprehensive Transportation Plan

The VCTC Comprehensive Transportation Plan (CTP) is a transportation vision for Ventura County and identifies ways of achieving this vision within constrained resources. The CTP is a long-range policy document, built from community-based, local priorities and community-expressed need to enhance regional connections. It is aimed at ensuring mobility and enhancing the quality of life for all Ventura County residents. The CTP provides a framework for future community-based planning and collaboration and informs Ventura County's long range transportation decisions. The current CTP was adopted in August 2013. The VCTC is in the process of preparing the 2023 CTP.

Local Regulations

Development Impact Fees

The City of Moorpark requires new development projects to pay their fair share cost for infrastructure and services in the City through payment of development impact fees. The City adopted Development Contribution and Environmental Fees most recently in 2021, including a Citywide Traffic Mitigation Fund, Traffic Impact Mitigation Fee (Ventura County), and Transportation System Management fees (Moorpark 2021).

5.17.1.2 EXISTING CONDITIONS

Existing Roadway Network

A map of the city's circulation system is shown on Figure 5.17-1, *Moorpark Roadway Network*. The existing roadway network relies primarily on two freeways for regional connections—State Route 23 (SR-23) south through Thousand Oaks and SR-118 east through Simi Valley. Other surface roadway connections to neighboring communities include:

- **Los Angeles Avenue** (coterminous with SR-118), providing access west to Somis and onward to Saticoy and Ventura as well as southwest to Camarillo via Somis Road (coterminous with SR-34).
- **Grimes Canyon Road,** providing access north to Fillmore.
- **Walnut Canyon Road** (coterminous with SR-23), providing access north to Fillmore via Broadway and merging with Grimes Canyon Road.
- **Moorpark Road,** providing access south to Thousand Oaks and southwest to Camarillo via Santa Rosa Road.
- **Tierra Rejada Road,** providing access east to Simi Valley.
- **Arroyo Drive/Los Angeles Avenue,** providing access east to Simi Valley.

Roadway Classifications

Moorpark's roadway network uses a hierarchy of facility types based on differences in size, function, and capacity. There are five categories of roadway, from freeways to local collector streets.

- **Freeways.** Two freeways converge in Moorpark, providing regional connections.
  - **SR-23** provides access to Thousand Oaks and to US-101 to the south, with three general-purpose lanes in each direction. It connects with the surface roadway network at Tierra Rejada Road and Los Angeles Avenue, north of which it transitions into SR-118. SR-23 resumes as a surface road, Walnut Canyon Road, continuing north of the city.
  - **SR-118** provides access to Simi Valley and Los Angeles to the east, with two general-purpose lanes in each direction. It connects with the surface roadway network at Collins Drive and Princeton Avenue. West of Princeton Avenue, SR-118 assumes a north-south orientation before transitioning into SR-23 at Los Angeles Avenue, with which it is coterminous as a surface road as it continues west.
- **Six-Lane Arterial.** Six-lane arterials in Moorpark contain no on-street parking and exhibit a typical right-of-way width of 110 to 120 feet and a curb-to-curb pavement width of 90 to 104 feet. They may or may not have controlled access. The City's Highway Network Map designates two roadways as six-lane arterials: Los Angeles Avenue (SR-118) west of its interchange with the SR-118 and SR-23 freeways, and a proposed roadway to carry SR-118 west from its interchange with Princeton Avenue to Tierra Rejada Road. However, the only six-lane arterial currently in existence in Moorpark is a stretch of Los Angeles Avenue (SR-118) from the SR-118/SR-23 freeway interchange to Leta Yancy Road.
- **Four-Lane Arterial.** Four-lane arterials in Moorpark exhibit a typical right-of-way width of 80 to 100 feet and a curb-to-curb pavement width of 60 to 80 feet. They may or may not have restricted on-street parking and controlled access. Most have landscaped center medians with dedicated left-turn pockets at all intersections and right-turn pockets present at some major intersections. Examples of four-lane arterials

include all of Terra Rejada Road, Spring Road north of Los Angeles Avenue, Campus Park Drive east of Princeton Avenue, Princeton Avenue between Campus Park Drive and Avenida Colonia, and Collins Drive.

- **Rural Collector.** Rural collectors in Moorpark are two- to four-lane roadways exhibiting a typical right-of-way width of 70 to 90 feet and a curb-to-curb pavement width of 54 to 64 feet. Rural collectors facilitate roadway connections outside the city center, and circumstances for widening them depend on surrounding development in the City's sphere of influence. According to the existing General Plan circulation map, the only designated rural collector in the city is a proposed segment of Broadway extending eastward around Moorpark College to connect with the SR-118 freeway. However, there is no existing roadway currently designated a rural collector.

- **Local Collector.** Local collectors are two-lane roadways exhibiting a typical right-of-way width of 50 to 70 feet and a curb-to-curb pavement width of 36 to 54 feet. Local collectors facilitate connections within local residential, commercial, and industrial areas as well as connections from these areas to the broader roadway network. Wider roadway dimensions are required in industrial areas to allow for a center turn lane and more space for truck maneuvering. In hillside areas, graded shoulders and on-street parking are required as safety measures.

Bicycle Network

The city's existing bicycle facilities are shown on Figure 5.17-2, *Moorpark Bicycle Network*. The City's designated bikeway network consists of three types of facilities:

- **Class I Bikeway (Bike Path).** A special type of facility designed for exclusive use by bicyclists with its own right-of-way and completely separated from other modes of transportation by a physical barrier, grade separation, or open space.

- **Class II Bikeway (Bike Lane).** A paved area for preferential use of bicycles between the travel lane closest to the curb and the curb. Pavement markings and signage are used to indicate its presence.

- **Class III Bikeway (Bike Route).** A conventional street where bike use is indicated by signage only and bicycle traffic shares space with motor vehicle traffic.

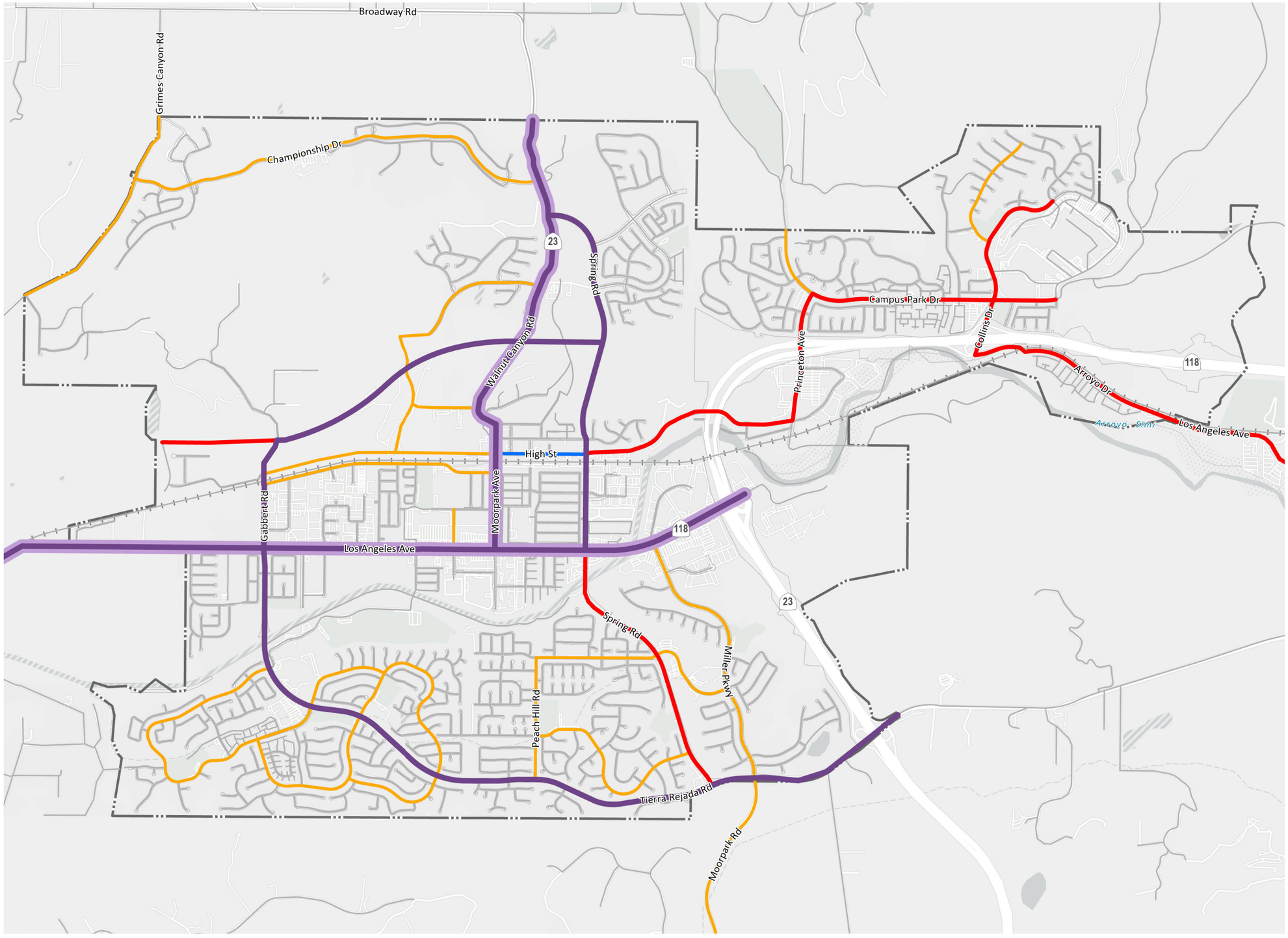
The city's bikeway network consists of a relatively well-connected system of Class II bike lanes along the city's four-lane arterials and a handful of local collectors. The network includes a few Class I bike path segments, including one connecting Moorpark Avenue and Park Lane (north of the Town Center Shopping Mall). Bicycle facilities are notably absent from Los Angeles Avenue (SR-118). The Class II bike lane network includes:

- **Tierra Rejada Road** south of Los Angeles Avenue, providing access to Glenwood Park, Arroyo Vista Community Park, South Meadows Park, and Tierra Rejada Park.

- **Mountain Trail Street** between Mountain Meadow Drive and Countrywood Drive. Countrywood Drive between Mountain Trail Street and Tierra Rejada Road.

- **Poindexter Avenue** between Gabbert Road and Moorpark Avenue, providing access to Poindexter Park.

Figure 5.17-1
Moorpark Roadway Network



City Boundary
Railroad

Road Classification
- Principal Arterial
- Principal Arterial (Caltrans)
- Minor Arterial
- Collector
- Downtown Collector
- Local/Private Street

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Draft Environmental Impact Report

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Source: Iteris, 2022

Date: 12/12/2022

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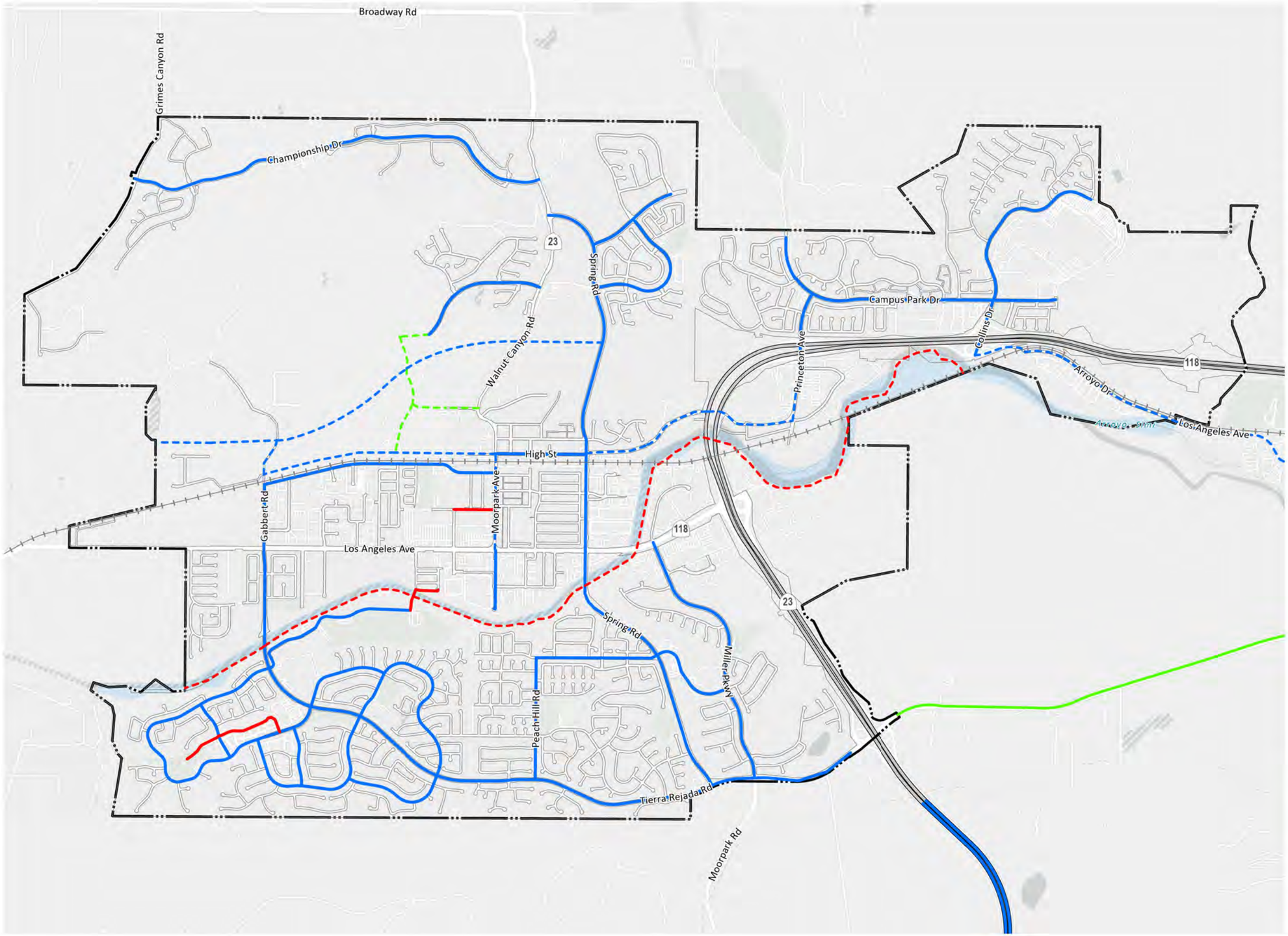
Figure 5.17-2

Moorpark Bicycle Network



City Boundary

Railroad

Bike Facilities

- Class I Bike Path - Existing
- Class I Bike Path - Proposed
- Class II Bike Lanes - Existing
- Class II Bike Lanes - Proposed
- Class III Bike Route - Existing
- Class III Bike Route - Proposed

MADE BY MOORPARK General Plan 2050

Draft Environmental Impact Report

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Source: Iteris, 2022

Date: 11/1/2022

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- **Championship Drive** between Grimes Canyon Road and Walnut Canyon Road.
- **Gabbert Road** between Poindexter Avenue and Los Angeles Avenue.
- Peach Hill Road north of Tierra Rejada Road and continuing east to Miller Parkway, providing access to Peach Hill Park.
- **Miller Parkway** between Los Angeles Avenue and Tierra Rejada Road, providing access to Miller Park.
- **Spring Road** south of Los Angeles Avenue, providing access to Monte Vista Nature Park, and north of 2nd Street to Walnut Canyon Road.
- **High Street** between Moorpark Avenue and Spring Street within Downtown, providing access to the Metrolink/Amtrak station.
- A portion of **Princeton Avenue** connecting the central part of the city with Campus Park Drive.
- **Campus Park** Drive from northern terminus to Collins Drive, then east of Collins Drive in the eastbound direction only.
- **Collins Drive** north of Campus Park Drive, providing access to Moorpark College.

Pedestrian

Sidewalks are generally present along roadways of all types in the developed areas of the city, from residential local collectors to Los Angeles Avenue (SR-118), and marked crosswalks are available at major intersections. Downtown's High Street is an important pedestrian-oriented district with street-fronting businesses and pedestrian access to the Metrolink/Amtrak station.

Transit

Public transportation options in the city are varied and include rail, local fixed-route bus, county intercity express bus, paratransit, and dial-a-ride services. Bus services are financed using a quarter-cent sales tax authorized by the Transportation Development Act in 1989 as well as with developer fees. General fund revenue has historically not been used for public transit in significant amounts.

The Moorpark train station along High Street in the Downtown area is served by both Metrolink's Ventura County Line and Amtrak's Pacific Surfliner. The station has 270 free parking spaces, charging stations, and bicycle parking. Metrolink has approximately 200 boardings and alightings (200 round trips) per weekday. Amtrak has approximately 50 combined boardings and alightings per day.

Moorpark Transit is a fixed-route bus service that operates during weekdays between 6:15 a.m. and 6:00 p.m. Two routes are provided and are similar in the destinations served. Both routes run along the major roadways in the city, including Los Angeles Avenue, Tierra Rejada Road, Moorpark Avenue, Spring Road, etc. The routes

serve destinations such as city hall, the Metrolink/Amtrak station, Moorpark College, shopping centers along Los Angeles Avenue, and schools and parks.

Countywide intercity express bus service is provided by VCTC Transit's East County and Cross County Limited Services. East County lines use SR-23 and SR-118 to provide service south to Thousand Oaks and east to Simi Valley, and the Cross County Limited uses SR-118 to provide service east to Simi Valley and west to Somis, with further service provided to Camarillo, Oxnard, and Ventura via SR-34 and US-101. For both lines, stops in the city include Moorpark Station, the industrial district along Princeton Avenue (East County only), and Moorpark College. Both routes also intersect with other VCTC bus routes, linking all of Ventura County and the San Fernando Valley.

Local paratransit that complies with the Americans with Disabilities Act is available in the form of a dial-a-ride system to persons with disabilities who are certified by the City and VCTC. Travel within the city is available from 6:00 a.m. to 6:00 p.m. on weekdays, and Saturday service is available from 8:00 a.m. to 6:00 p.m. Intercity paratransit to other Ventura County cities and connections to Gold Coast Transit and LA Access are available during the same time frame.

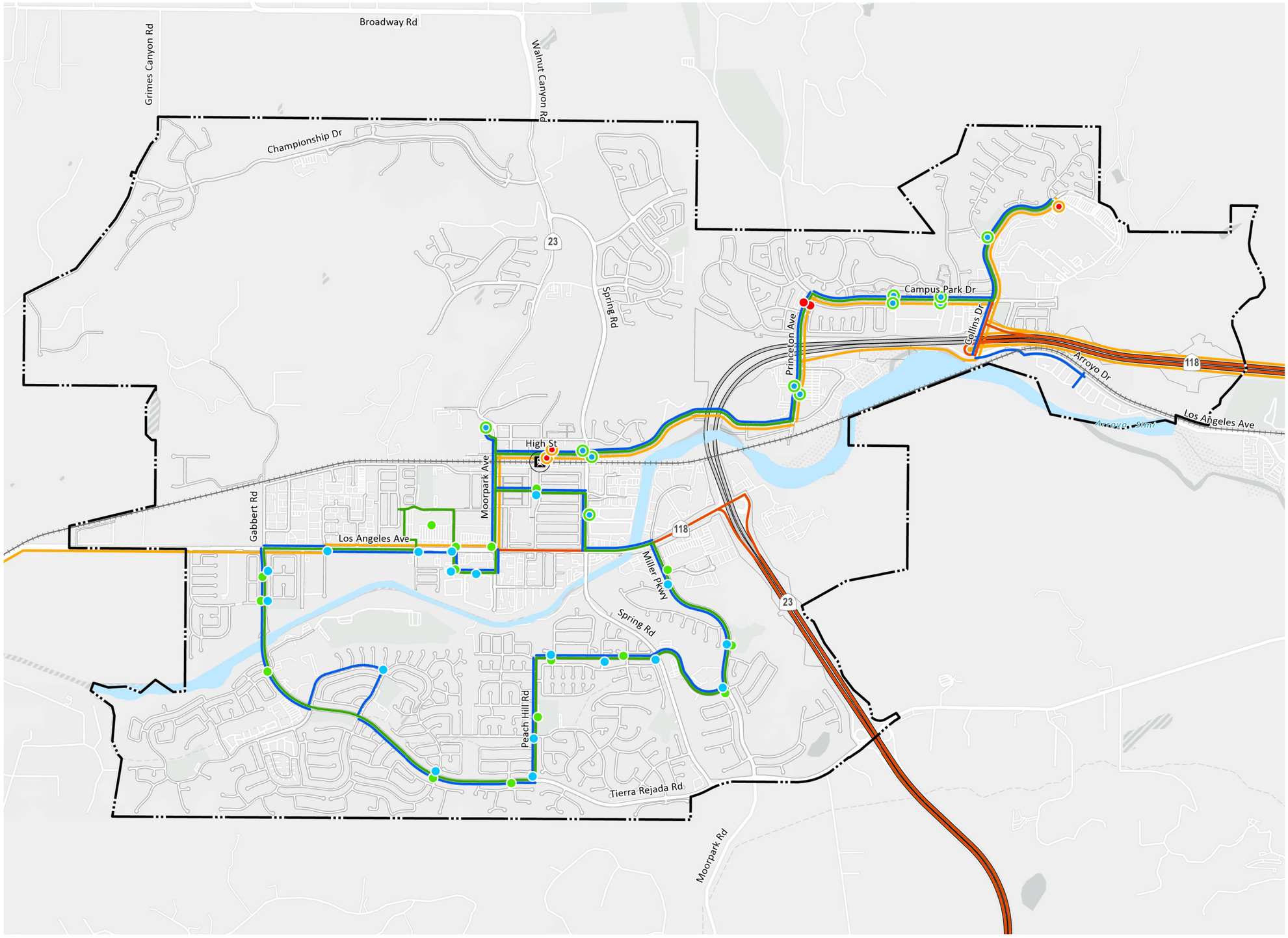
Additional dial-a-ride services in the city are available for seniors aged 65 and over, with nearly identical service to paratransit except without a connection to LA Access. Hours of operation are the same as other paratransit services. The City's transit system is shown on Figure 5.17-3, *Transit System*.

In addition, the City approved a pilot "Mobility On Demand Rideshare Program." The goal of the pilot project is to explore the feasibility of replacing portions of the City's fixed-route bus service with a general dial-a-ride service that provides more efficient service to residents at a reduced cost. Vehicles with capacity for eight to twelve passengers would pick up and drop off at designed "virtual stops" throughout the city. The service is anticipated to operate from 6:00 a.m. to 6:00 p.m., Monday through Friday.

Goods Movement

Goods are moved to, from, and through the city along the roadway system and along the Union Pacific (UP) rail line. Industrial areas of the city are on the eastern and western sides of Los Angeles Avenue (SR-118). Other major truck generators near the city are the sand and gravel pits north of the city adjacent to Grimes Canyon Road (SR-23) and Roseland Avenue and agricultural lands surrounding the city. Los Angeles Avenue is a major east-west route for interregional truck travel.

Figure 5.17-3
Transit System



City Boundary

Transit Stops

- Moorpark Transit Line 1
- Moorpark Transit Line 2
- Moorpark Transit Both Lines
- VCTC East County
- VCTC East County & County Connector
- Amtrak Metrolink Station
- Amtrak/Metrolink

Transit Lines

- Moorpark Transit Bus Line 1
- Moorpark Transit Bus Line 2
- VCTC East County Bus Line
- VCTC Cross-County Connector Bus Line

MADE BY MOORPARK General Plan 2050

Draft Environmental Impact Report

0 1,000 2,000 4,000 FT

Source: Iteris, 2022

Date: 12/12/2022

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Existing VMT

Existing VMT generated by land uses in Moorpark is shown in Table 5.17-1, *City of Moorpark Existing VMT*. See "Methodology" under Section 5.17.3.2 of this DEIR for a description of the different VMT scenarios.

Table 5.17-1 City of Moorpark Existing VMT

Scenario	Total Home-Based Daily VMT	Total Work-Based Daily VMT	Total Daily VMT	VMT/SP[1]
SB 375 VMT – Origin-Destination (OD) Method[2]	NA	NA	881,687	17.86
SB 743 VMT[3]	826,750	262,244	1,088,994	22.06

Source: Iteris 2022a.
Notes:
VMT/SP: vehicle miles traveled per service population (residents + employees); OD = origin-destination
[1] Based on a total existing population of 36,445 people and 12,915 employees in Moorpark.
[2] VMT generated by trips originating or ending at in Moorpark used for the Air Quality, Energy, and GHG sections.
[3] VMT associated with commute trips originating or ending at employment centers or homes in Moorpark (commute VMT).

5.17.2 Thresholds of Significance

According to Appendix G of the CEQA Guidelines, a project would normally have a significant effect on the environment if the project would:

T-1 Conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities.

T-2 Conflict or be inconsistent with CEQA Guidelines § 15064.3, subdivision (b).

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

T-4 Result in inadequate emergency access.

VMT Thresholds

The City of Moorpark utilizes the Governor's Office of Planning and Research's VMT Technical Advisory as the basis for identifying transportation impacts in the City. For land use plans which include both residential and employment uses, the appropriate analysis metric is VMT per service population, where service population is defined as the number of residents plus the number of jobs. This EIR compares VMT generated by the Moorpark General Plan 2050 to VMT generated by the existing land uses in the city.

Moorpark's thresholds of significance for use as part of the environmental review process under CEQA, as defined in the City's VMT Impact Thresholds is:

- **15 Percent Below Existing VMT/SP.** The project would result in a significant impact if the project conditions' (i.e., the General Plan Update conditions) average daily citywide VMT per service population exceeds 15 percent below the existing conditions average daily citywide VMT per service population.

As identified in Table 5.17-1, VMT/SP under existing (2022) conditions is 22.1 VMT/SP. The SB 743 threshold that corresponds with a 15 percent reduction in VMT/SP below existing conditions is 18.75.

Multimodal Facility Impacts

A significant impact would occur to transit, bicycle, and/or pedestrian facilities if the project would conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities.

5.17.3 Environmental Impacts

5.17.3.1 METHODOLOGY

The DEIR evaluates the cumulative effect of the Moorpark General Plan 2050 on VMT and uses VCTC's VCTM—a subarea model of the SCAG travel demand model—to generate the VMT statistics. The VCTM is consistent with the 2016 SCAG RTP/SCS travel-demand model assumptions and inputs. The model consists of a 2016 base year scenario and 2040 future year scenario. The VCTM consists of a detailed traffic analysis zone (TAZ) structure in the City of Moorpark, including 19 TAZs in the city.

For existing conditions, the base year land uses in VCTM for Moorpark were updated to reflect the existing land use inventory. The base year 2016 model scenario inputs were interpolated to represent existing year 2022. For the horizon year analysis, the VCTM 2040 scenario is used to represent year 2050 conditions. This is a conservative approach, because a review of SCAG's 2016 RTP/SCS and 2020 RTP/SCS shows a reduction in population and employment forecasts in Ventura County in SCAG's buildout year 2045 versus 2040. The future year land use datasets and roadway network in Moorpark were updated to be consistent with the buildout of the Moorpark General Plan 2050.

Table 5.17-2*, City of Moorpark General Plan 2050 VMT*, show the VMT associated with the buildout scenarios using the Origin-Destination VMT methodologies (described below)—SB 743 VMT for the Transportation analysis (VMT/SP); and SB 375 methodology for the Air Quality, Energy, and GHG analyses.[1]

[1] In addition to the two VMT methodologies conducted for the Moorpark General Plan 2050, there is another "Boundary Method" VMT analysis that was not conducted for the proposed project. The boundary method is the sum of all weekday VMT on a roadway network within a designated boundary (e.g., city limits). Boundary method VMT estimates VMT by multiplying the number of trips on each roadway segment by the length of that segment. This approach uses all trips, including those that do not begin or end in the designated boundary, and is another way to summarize VMT. This is the only VMT method that captures the effect of cut-through and/or displaced traffic.

Table 5.17-2 City of Moorpark General Plan 2050 VMT

Scenario	Total Home-based Daily VMT	Total Work-based Daily VMT	Total Daily VMT	VMT/SP[1]
SB 375 VMT[2]	NA	NA	1,104,372	14.92
SB 743 VMT	1,087,963	281,597	1,369,560	18.50

Source: Iteris 2022a.
Notes: VMT/SP: vehicle miles traveled per service population (residents + employees); OD = origin-destination
[1] Based on a total existing population of 53,781 people and 20,249 employees in Moorpark (74,030 SP).
[2] VMT generated by trips originating or ending at in Moorpark used for the Air Quality, Energy, and GHG sections which utilize the California Air Resources Board's Regional Target Advisory Committee Recommendations on accounting for VMT that crosses jurisdictional boundaries.

The Origin/Destination (OD) method for calculating VMT sums all weekday VMT generated by trips with at least one trip end in the study area and tracks those trips to their estimated origins/destinations within the model boundary. The OD method is completed after the final loops of assignment in the travel demand model (after person trips have been converted to total vehicle trips). Origins are all vehicle trips that start in a specific traffic analysis zone, and destinations are all vehicle trips that end in a specific traffic analysis zone. The OD method accounts for external and truck trips, and therefore provides a more complete estimate of all VMT in the study area.

This methodology is also used to estimate VMT for the Air Quality, Energy, and GHG sections of this DEIR. The only difference from the SB 743 VMT calculation it that the SB 375 methodology utilizes CARB's Regional Target Advisory Committee recommendations on accounting for VMT that crosses jurisdictional boundaries (see Appendix K).[2]

5.17.3.2 IMPACT ANALYSIS

The applicable thresholds are identified in brackets after the impact statement.

Impact 5.17-1: The proposed project would not conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities. [Threshold T-1]

The Moorpark General Plan 2050 includes modifications to the city's circulation network to improve mobility:

- **Roadway Network**
  - New North Hills Parkway facility
  - Extension of Meridian Hills Drive
  - Extension of Casey Road

[2] Under the Regional Targets Advisory Committee methodology for SB 375, 100 percent of internal-to-internal trips and 50 percent of internal-to-external or external-to-internal trips are accounted for. These estimates for each scenario and by vehicle type (passenger car, light truck, medium truck and heavy truck) are provided are provided in Attachment A of the VMT Memorandum (see Appendix K of the DEIR).

- Extension of High Street
- Extension of Gabbert Road

- **Bicycle Network**
  - Class I bike path along the Arroyo Simi
  - Class II bike lanes along High Street
  - Class II bike lanes along Gabbert Road
  - Class II bike lanes along Princeton Avenue
  - Class II bike lanes along Arroyo Drive
  - Class III shared bike lanes along Meridian Hills Drive
  - Class III shared bike lanes along Casey Road

The proposed project's planned transportation networks, goals, and policies provide consistency related to regional active transportation plans, transit plans, and other mobility infrastructure—specifically, SCAG's Connect SoCal and VCTC's Comprehensive Transportation Plan.

SCAG Regional Transportation Plan/Sustainable Communities Strategy

SCAG's RTP/SCS, Connect SoCal, is a long-range visioning plan that builds upon and expands land use and transportation strategies established over several planning cycles to increase mobility options and achieve a more sustainable growth pattern. The Connect SoCal RTP/SCS is a planning document for the region, allowing project sponsors to qualify for federal funding. In addition, Connect SoCal 2024 will identify a combination of transportation and land use strategies that help the region achieve state greenhouse gas emission reduction goals and federal Clean Air Act requirements, preserve open space areas, improve public health and roadway safety, and support our vital goods movement industry.

The City coordinates with SCAG to integrate general plan land use and transportation plans in the RTP/SCS. The following regionally significant transportation improvements are included in the 2020 Connect SoCal in the City of Moorpark.

- **RTP ID VEN051213: Route 23 Moorpark Avenue from Third Street to Casey Road.** Widen from one lane in each direction to one lane northbound and two lanes southbound. Realign First Street/Poindexter intersections and upgrade rail crossing. The Moorpark General Plan 2050 defines Moorpark Avenue as a Principal Arterial (State Highway), which range from two to four lanes. The proposed project does not include this project; however, the designation of Moorpark Avenue as Principal Arterial is not inconsistent with this planned improvement.

- **RTP ID VEN34089: Los Angeles Avenue from Route 23 (Moorpark Avenue) to east of Spring (0.6 miles).** Reconstruct sidewalks, realign roadway, and widen from four to six lanes. The Moorpark General Plan 2050 defines Los Angeles Avenue as a Principal Arterial (State Highway) with up to six-lanes; therefore, the proposed project is consistent with the planned improvement.

- **RTP ID 5A0742: North Hills Parkway.** Construct four-lane freeway (total of both directions), connection of a new alignment. The Moorpark General Plan 2050 does not assume implementation of the North Hills Parkway as a new highway at buildout. Rather, the North Hills Parkway is identified as a new arterial on the Roadway Network because there no longer a direct connection of the North Hills Parkway to SR-118.

- **RTP ID 5A0743; Princeton Avenue.** Widen, realign, and reconstruct from two lanes to two lanes plus center turn lane and bike lanes. The Moorpark General Plan 2050 defines Princeton Avenue as a Minor Arterial, which range from two to four lanes. The proposed project does not include this project; however, the designation of Princeton Avenue as a Minor Arterial is not inconsistent with this planned improvement.

- **RTP ID 5A0703: SR-118.** Interchange and signal improvement. Widen westbound off-ramp to add a free right-turn lane and signal modification. The Moorpark General Plan 2050 does not include this Caltrans Project; however, the proposed project would not conflict with this planned improvement.

Additionally, the Moorpark General Plan 2050 includes strategies to focus development in the city's high quality transit area, as defined by SCAG around the Metrolink Station. The strategies that focus development in these transit rich areas allow transit and land use to work together. The CARB's Mobile Source Strategy recognizes that coordinated regional planning can improve California's land use patterns and transportation policy in a way that reduces transportation-related emissions by reducing growth in VMT.

The following policies in the Land Use Element would support development in the high quality transit area:

- **Policy LU-3.1 Housing for all residents.** Provide a mix of residential densities to accommodate the housing needs of all members of the community and address Moorpark's fair share of regional housing needs consistent with the Housing Element.

- **Policy LU-3.2 Housing types.** Provide for the development of a diversity of residential product types, lot sizes, and designs, unless determined by the City to be infeasible due to the size of the project.

- **Policy LU-3.3 Broader mix of housing types.** Facilitate the development of mid-range, or "missing middle," housing units such as duplexes, multiplexes, courtyard homes, and townhomes.

- **Policy LU-3.5 Mixed-use development.** Provide for development projects that mix housing with commercial uses to enable Moorpark's residents to live close to businesses and employment, reducing vehicle trips, and supporting social interactions.

- **Policy LU-3.7 Transit-oriented development.** Promote opportunities to develop uses that can economically benefit from their proximity to the Moorpark Metrolink Station and promote increased ridership.

- **Policy LU-4.1 Sustainable urban form.** Provide an overall pattern of land uses that promotes efficient development; reduces automobile dependence, greenhouse gas emissions; and consumption of non-

renewable resources; ensures compatibility among uses; enhances community livability and health; and sustains economic vitality.

- **Policy LU-19.3 Relationship to transit station.** Locate and design development to capitalize on and reflect its adjacency to the Metrolink station, including developing direct pedestrian connections.

Ventura County Transportation Commission Comprehensive Transportation Plan

The CTP is a transportation vision for Ventura County and identifies ways of achieving this vision within constrained resources. The CTP is a long-range policy document, built from community-based, local priorities and community-expressed need to enhance regional connections. It is aimed at ensuring mobility and enhancing the quality of life for all Ventura County residents. The CTP provides a framework for future community-based planning and collaboration and informs Ventura County's long-range transportation decisions. The Moorpark General Plan 2050 is consistent with the CTP Shared Vision of the Future of the transportation system:

- Preserving Quality of Life
- A Connected and Integrated Transportation System
- Convenient and Accessible Options
- Inclusive of All Community Members and Needs
- Safe
- Balances All Interests
- Built from a Sustainable Plan

In addition, the Moorpark General Plan 2050 is consistent with the identified local priorities for Moorpark:

- Expanding the bicycle network and safety
- Improving local roads for all users
- Balancing expansion of intercity connections with preserving rural character
- Focusing on critical and lifeline connections (i.e., seniors and medical, youth and schools)
- Improving access to public information and communications
- Access to Moorpark College

Summary

As shown above, the proposed project would not conflict with implementation of programs, plans, ordinances and policies addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities and impacts are less than significant.

Level of Significance Before Mitigation: Less than significant.

Impact 5.17-2: The Moorpark General Plan 2050 would achieve a 15 percent reduction in VMT compared to existing conditions. [Threshold T-2]

Table 5.17-3, *VMT Comparison the Moorpark General Plan 2050 Compared to Existing Conditions*, shows SB 743 VMT associated with buildout of the Moorpark General Plan 2050. As identified previously, the City utilizes a VMT threshold of 15 percent reduction in VMT/SP as the SB 743 transportation metric under CEQA. Based on the existing VMT/SP for Moorpark shown in Table 5.17-1, the VMT threshold for the city is 18.75 VMT/SP. As identified in this table, VMT/SP at buildout is anticipated to be 18.50 VMT/SP and would not exceed the threshold of 18.75 VMT/SP. Therefore, the Moorpark General Plan 2050 would align with the local VMT reduction goal.

Table 5.17-3 VMT Comparison of the Moorpark General Plan 2050 compared to Existing Conditions

Scenario	Moorpark General Plan 2050 VMT/SP	VMT/SP Threshold (15 Percent Below Existing)	Significant
SB 743 VMT/SP[1]	18.50	**18.75**	No

Source: Iteris 2022a.
Note: SP = service population

In addition, the Moorpark General Plan 2050 includes several policies aimed at reducing VMT.

- **Policy CI-1.2 Complete streets.** Design, plan, maintain, and operate streets using complete streets[1] principles for all types of transportation projects including design, planning, construction, maintenance, and operations of new and existing streets and facilities. Encourage street connectivity that aims to create a comprehensive, integrated, connected network for all modes.
- **Policy CI-2.4 VMT reduction.** Work to reduce VMT through land use planning, enhanced transit access, localized attractions that reduce the need for travel to adjoining communities, and improved access to non-vehicular modes of transportation.
- **Policy CI-4.1 Moorpark Transit.** Support Moorpark Transit and other transit operators in the City.
- **Policy CI-4.2 Integration with mobility networks.** Work with public transit providers to ensure transit stations and stops are connected with pedestrian, bicycle, and micromobility networks to maximize access.
- **Policy CI-4.3 Transit facilities.** Incorporate improvements supporting public transit use in new development and public spaces such as bus benches, shelters, tree canopy, pads and/or turn-outs.
- **Policy CI-5.1 New bicycle and pedestrian facilities.** Prioritize plans for new bicycle and pedestrian facilities to provide continuity and close gaps in the bikeway and sidewalk network.
- **Policy CI-5.2 Improvements to bikeway network.** Require proposed residential, commercial, and industrial developments to include bikeways in their street improvement plans, consistent with the Circulation Element Bikeway Network Plan (Figure 6) and construct pertinent improvements.

- **Policy CI-5.9 Partnerships with schools.** Develop partnerships with local schools to identify and implement mobility improvements and non-infrastructure programs that improve safety for students traveling to/from school and increase the number of students walking and bicycling to school.

- **Policy CI-6.1 Employer incentives.** Encourage businesses to provide incentives for employees to utilize alternatives to the conventional automobile transportation to reduce energy consumption, noise pollution, air pollution, and greenhouse gas emissions, such as shared ride programs, parking cash out , transit benefits, and allowing telecommuting and alternative work schedules.

- **Policy CI-6.3 Ventura County Air Pollution Control District.** Support the Ventura County Air Pollution Control District in its effort to implement transportation demand management strategies.

- **Policy CI-6.4 TDM fund expenditure.** The City shall develop a program for expending transportation demand management funds collected as mitigation for developments' air quality impacts.

Therefore, VMT impacts associated with the Moorpark General Plan 2050 are less than significant.

Level of Significance Before Mitigation: Less than significant.

Impact 5.17-3: The Circulation Element adequately addresses potentially hazardous conditions (sharp curves, etc.) and potential conflicting uses. [Threshold T-3]

One of the objectives of the Moorpark General Plan 2050 is to ensure future development and transportation facilities would improve connectivity and linkages throughout the city. The Moorpark General Plan 2050 includes improvements to the roadway and bicycle network in the Circulation Element. These proposed improvements would be designed to City and State engineering design standards to meet sight-distance requirements, including visibility of pedestrians and bicyclists. The Moorpark General Plan 2050 does not propose any incompatible uses that would increase hazards. As a result, the proposed project would have a beneficial impact on geometric design features and incompatible uses.

The following policies under the Circulation Element would have a beneficial impact on safety.

- **Policy CI-1.3 User safety.** Enhance the safety of all users of the transportation system.

- **Policy CI-2.7 New technologies.** Evaluate opportunities to incorporate new materials, technologies, or design features that improve safety and operations of the circulation system.

- **Policy CI-2.9 Driveway access.** Limit driveway access points onto arterial roadways where feasible, to ensure the smooth and safe flow of vehicles and bicycles.

- **Policy CI-5.7 Pedestrian safety.** Require sidewalks to be designed for observation from vehicles and bicycles to ensure safety of pedestrians and follow accepted traffic engineering practice, when included as part of roadway improvement plans. Provide convenient and high-visibility crossings for pedestrians.

- **Policy CI-5.8 Buffers and protected lanes.** Recognize that high-speed streets, high-volume streets, and truck routes can increase pedestrian and bicycle stress levels and decrease comfortability. To mitigate impacts, provide increased buffers and protected bicycle lanes in high-stress areas, where feasible.

- **Policy CI-5.9 Partnerships with schools.** Develop partnerships with local schools to identify and implement mobility improvements and non-infrastructure programs that improve safety for students traveling to/from school and increase the number of students walking and bicycling to school.

The proposed project would not substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment). Thus, this impact is considered less than significant.

Level of Significance Before Mitigation: Less than significant.

Impact 5.17-4: The Moorpark General Plan 2050 would provide for adequate emergency access. [Threshold T-4]

The Moorpark General Plan 2050 does not include elements that would impede emergency vehicle access. Public roadways and buildings would conform to City and County Fire Department standards for access. Additionally, a review of emergency access is included as part of the City's Design Review process.

The City has prepared a draft Emergency Operations Plan (2022) that identifies planned response to an extraordinary emergency situation. Moorpark also participates in the Ventura County Multi-jurisdictional Hazard Mitigation Plan, which was last updated in 2022. As shown on Figure 5.20-4, *Evacuation Routes*, in Section 5.20, *Wildfire*, interstate highways would serve as major emergency response and evacuation routes, including SR-118 and SR-23. Additionally, the Ventura County Fire Department reviews development applications to ensure that adequate emergency accessibility is provided based on local and state guidance.

Policies under the Safety Element Goal 1 would also ensure that there is an effective emergency management framework in Moorpark.

- **Policy SE-1.9 Multi-Hazard Evacuation Plan.** Identify evacuation routes and develop a multi-hazard evacuation plan, in coordination with surrounding jurisdictions, to ensure evacuation routes remain open and functional during emergencies. Participate in the Ventura County Multi-Jurisdictional Hazard Mitigation Plan.

- **Policy SE-1.10 Ingress and egress.** Require new development to have two ingress and egress routes that account for existing and proposed traffic evacuation volumes at buildout.

- **Policy SE-1.11 Secondary ingress and egress.** Explore secondary means of ingress and egress in areas with evacuation constraints, as shown in Figure 11b, for new subdivisions or developments of 10 units or more.

- **Policy SE-1.12 Evacuation assistance program.** Develop an evacuation assistance program, in coordination with Moorpark City bus, paratransit, and dial-a-ride agencies to help those with limited mobility or lack of access to a vehicle evacuate safely.

- **Policy SE-1.19 Livestock and large animal evacuation.** Work with Ventura County Animal Services and Ventura County Office of Emergency Services to ensure that owners of livestock and large animal are prepared for and have the ability to evacuate during an emergency.

Implementation of the Moorpark General Plan 2050 would not impede emergency access. Thus, this impact is considered less than significant.

Level of Significance Before Mitigation: Less than significant.

5.17.4 Relevant General Plan Policies

Circulation Element

- **Policy CI-1.1 Multimodal transportation.** Require that the planning, design, and construction of all transportation projects consider the needs for all modes of travel to create safe, livable, and inviting environments for motorists, pedestrians, bicyclists, and public transit users of all ages and abilities.

- **Policy CI-1.2 Complete streets.** Design, plan, maintain, and operate streets using complete streets[1] principles for all types of transportation projects including design, planning, construction, maintenance, and operations of new and existing streets and facilities. Encourage street connectivity that aims to create a comprehensive, integrated, connected network for all modes.

- **Policy CI-1.3 User safety.** Enhance the safety of all users of the transportation system.

- **Policy CI-1.4 System improvements.** Promote the continued improvement of the circulation system, through the improvement of sub-standard roadways, sidewalk crossings, and intersections and the construction of missing links and related facilities through the City's Capital Improvement Program (CIP).

- **Policy CI-1.5 Rail improvements.** Encourage the improvement and modification of rail transportation facilities to promote ridership and safety and minimize impacts on local circulation.

- **Policy CI-1.6 Rural areas.** Design roadways, pedestrian areas, walks, and other elements of mobility infrastructure in applicable outlying areas to convey a rural appearance while providing for low maintenance costs and safe passage of vehicles, pedestrians, equestrians, and bicycles.

- **Policy CI-1.7 Collaborate with Regional Partners.** Engage with Ventura County and the Ventura County Transportation Commission to achieve consistency between regional and local transportation improvements and the City's General Plan, and accomplish the City's future transportation goals.

- **Policy CI-1.8 Collaborate with Caltrans.** Engage with Caltrans to achieve consistency between regional and local transportation improvements and the City's General Plan and accomplish the City's future transportation goals.

- **Policy CI-1.9 Truck Safety.** Engage with the California Highway Patrol to ensure that large commercial trucks and trailers meet all California and federal safety standards and move safely throughout the Moorpark community.

- **Policy CI-1.10 Transportation Equity.** Consider health and equity in the design and operation of the City's transportation network; and make provisions for convenient, accessible, affordable, and alternative modes of mobility based on the needs of residents.

- **Policy CI-2.1 Roadway performance standard.** Maintain Level of Service "D" as the standard for system performance for traffic volumes on the circulation system. High Street between Moorpark Avenue and Spring Road is exempt from this standard. For roadways and interchanges already operating at a lower level of performance than level of service "D", the standard shall be to maintain or improve the current level of service.

- **Policy CI-2.2 Environmental impact threshold.** Maintain thresholds for the determination of environmental impacts for proposed residential, commercial, and industrial uses of a minimum reduction of per capita vehicle miles travelled (VMT) of 15% below existing and no net increase in per capita VMT compared to existing for all other land use types. Periodically review and adjust this threshold as appropriate in consideration of actual vehicle miles and greenhouse gas emissions resulting from implementation of the Land Use Plan.

- **Policy CI-2.3 VMT analysis.** Require the analysis of VMT per resident and/or per employee as part of CEQA environmental review, and development of a mitigation program to reduce any significant impacts consistent with State law.

- **Policy CI-2.4 VMT reduction.** Work to reduce VMT through land use planning, enhanced transit access, localized attractions that reduce the need for travel to adjoining communities, and improved access to non-vehicular modes of transportation.

- **Policy CI-2.5 Phasing to maintain LOS.** Coordinate project phasing to ensure that the timing of accompanying on-site and off-site circulation improvements maintain the level of service standards specified in CI 2.1.

- **Policy CI-2.6 Traffic signal coordination.** Prioritize traffic signal coordination and retiming to accommodate changes in travel patterns and traffic flows to limit unnecessary delay and congestion.

- **Policy CI-2.7 New technologies.** Evaluate opportunities to incorporate new materials, technologies, or design features that improve safety and operations of the circulation system.

- **Policy CI-2.8 Funds for transportation improvements.** Require that development projects participate in a transportation fee program and contribute their fair share of funds for transportation improvements, and that revenue generated by this program be allocated only toward transportation improvements.
- **Policy CI-2.9 Driveway access.** Limit driveway access points onto arterial roadways where feasible, to ensure the smooth and safe flow of vehicles and bicycles.
- **Policy CI-2.10 Emerging trends.** Update roadway and operational standards to account for emerging mobility trends, such as connected and autonomous vehicles, electric vehicle charging, micromobility, and microtransit.
- **Policy CI-2.11 Roadway widening.** No public widening of local roadways beyond their current width shall be considered without environmental review, public consultation, and City Council approval.
- **Policy CI-3.1 Roadway classifications.** Maintain roadway design standards that specify right-of-way, cross-sections, and other design criteria for designated roadway classifications as depicted in Figure 3.
- **Policy CI-3.7 Evacuation routes.** Designate and sign evacuation routes in consideration of the findings of the Risk Vulnerability Assessment.
- **Policy CI-4.1 Moorpark Transit.** Support Moorpark Transit and other transit operators in the City.
- **Policy CI-4.2 Integration with mobility networks.** Work with public transit providers to ensure transit stations and stops are connected with pedestrian, bicycle, and micromobility networks to maximize access.
- **Policy CI-4.3 Transit facilities.** Incorporate improvements supporting public transit use in new development and public spaces such as bus benches, shelters, tree canopy, pads and/or turn-outs.
- **Policy CI-4.4 Enhance access.** Implement improvements and programs enhancing the access to and use of public transit by students, senior citizens and those with limited mobility.
- **Policy CI-4.5 Pilot projects.** Encourage the use of new and emerging technologies through pilot programs.
- **Policy CI-5.1 New bicycle and pedestrian facilities.** Prioritize plans for new bicycle and pedestrian facilities to provide continuity and close gaps in the bikeway and sidewalk network.
- **Policy CI-5.2 Improvements to bikeway network.** Require proposed residential, commercial, and industrial developments to include bikeways in their street improvement plans, consistent with the Circulation Element Bikeway Network Plan (Figure 6) and construct pertinent improvements.
- **Policy CI-5.3 Funding for bikeways.** Require development projects to incorporate or participate in the funding of planned bikeways that allow the community to utilize bicycles as an alternative to automobiles.

- **Policy CI-5.4 Off-street bicycle paths.** Encourage the provision and maintenance of off-street bicycle paths.
- **Policy CI-5.5 Bicycle parking and storage.** Encourage the provision of bicycle parking and storage facilities at new or modified public, commercial, and industrial building sites.
- **Policy CI-5.6 Sidewalks and landscape buffers.** Require the development of sidewalks and incorporation of sustainable landscaping between the curb and sidewalk for new projects proposed in commercial and industrial areas along arterial and collector roadways. Provide landscaped buffers where feasible to separate pedestrian environments from the travel way adjacent to motor vehicles.
- **Policy CI-5.7 Pedestrian safety.** Require sidewalks to be designed for observation from vehicles and bicycles to ensure safety of pedestrians and follow accepted traffic engineering practice, when included as part of roadway improvement plans. Provide convenient and high-visibility crossings for pedestrians.
- **Policy CI-5.8 Buffers and protected lanes.** Recognize that high-speed streets, high-volume streets, and truck routes can increase pedestrian and bicycle stress levels and decrease comfortability. To mitigate impacts, provide increased buffers and protected bicycle lanes in high-stress areas, where feasible.
- **Policy CI-5.9 Partnerships with schools.** Develop partnerships with local schools to identify and implement mobility improvements and non-infrastructure programs that improve safety for students traveling to/from school and increase the number of students walking and bicycling to school.
- **Policy CI-6.1 Employer incentives.** Encourage businesses to provide incentives for employees to utilize alternatives to the conventional automobile transportation to reduce energy consumption, noise pollution, air pollution, and greenhouse gas emissions, such as shared ride programs, parking cash out , transit benefits, and allowing telecommuting and alternative work schedules.
- **Policy CI-6.2 Routing, scheduling, and planning priority.** Support the provision of alternative forms of public and private transit that offer routing, scheduling, and planning priority to the work force, youth, students, handicapped, senior citizens, and shoppers to the extent feasible.
- **Policy CI-6.3 Ventura County Air Pollution Control District.** Support the Ventura County Air Pollution Control District in its effort to implement transportation demand management strategies.
- **Policy CI-6.4 TDM fund expenditure.** The City shall develop a program for expending transportation demand management funds collected as mitigation for developments' air quality impacts.
- **Policy CI-7.1 Parking management.** Employ parking management strategies, such as shared parking in mixed use areas, on-street residential parking, and spill-over parking to avoid construction of unnecessary parking.
- **Policy CI-7.3 Supply and demand.** Ensure that parking supply accommodates the projected demand, allowing for shared parking as determined by additional parking analysis.

Safety Element

- **Policy SE-1.1 Multi-jurisdictional cooperation.** Continue the development of local preparedness plans and multi-jurisdictional cooperation and communication for emergency situations.
- **Policy SE-1.2 Emergency preparedness education.** Educate residents and businesses regarding appropriate actions to safeguard life and property during and immediately after emergencies.
- **Policy SE-1.3 Emergency coordination.** Coordinate with Ventura County, neighboring cities, and non-governmental partners to effectively prepare for and respond to hazards and natural disasters.
- **Policy SE-1.4 Emergency alerts.** Work with the Ventura County Office of Emergency Services to provide alerts about potential, developing, and ongoing emergency situations through extensive early-warning and notification systems that convey information to all residents, in multiple languages and formats, to ensure it is widely accessible, including persons with access and functional needs.
- **Policy SE-1.5 Hazard Mitigation Plan.** Incorporate the most recent version of the Ventura County Hazard Mitigation Plan, Moorpark Annex, most recently certified by FEMA in 2022, into this Safety Element by reference, as permitted by California Government Code Section 65302.6.
- **Policy SE-1.6 Community Emergency Response Team.** Expand the capabilities of the Community Emergency Response Team to provide more community members the tools to respond to disasters.
- **Policy SE-1.7 Redundant communication.** Create redundancies in the communication infrastructure to ensure communication services are available during emergencies.
- **Policy SE-1.8 Renewable back-up energy.** Provide renewable back-up power supplies, such as solar, wind, and battery power, for critical facilities, including cooling centers and resilience hubs.
- **Policy SE-1.9 Multi-hazard evacuation plan.** Identify evacuation routes and develop a multi-hazard evacuation plan, in coordination with surrounding jurisdictions, to ensure evacuation routes remain open and functional during emergencies. Participate in the Ventura County Multi-Jurisdictional Hazard Mitigation Plan.
- **Policy SE-1.10 Ingress and egress.** Require new development to have two ingress and egress routes that account for existing and proposed traffic evacuation volumes at buildout.
- **Policy SE-1.11 Secondary ingress and egress.** Explore secondary means of ingress and egress in areas with evacuation constraints, as shown in Figure 11b, for new subdivisions or developments of 10 units or more.
- **Policy SE-1.12 Evacuation assistance program.** Develop an evacuation assistance program, in coordination with Moorpark City bus, paratransit, and dial-a-ride agencies to help those with limited mobility or lack of access to a vehicle evacuate safely.

- **Policy SE-1.13 Resilience hubs.** Establish a network of equitably located resilience hubs throughout Moorpark and ensure that resilience hubs are situated outside of areas at risk from hazard impacts to the extent possible, offer refuge from extreme heat and poor air quality due to regional wildfire smoke, and are equipped with renewable energy generation and backup power supplies. Such facilities should be in easily accessible locations and be available to all community members.

- **Policy SE-1.14 Resilient critical and lifeline facility siting.** Locate new critical and lifeline facilities outside of flood and dam inundation zones, very high fire hazard severity zones, and landslide susceptibility areas, when feasible. If not feasible, appropriately site, design, and construct new critical facilities to be resilient to flooding, fires, and landslides.

- **Policy SE-1.15 Hazard mapping.** Update hazard mapping with each update to the Safety Element, or earlier if new information becomes available, to ensure the City relies on best available hazard mapping to inform decisions.

- **Policy SE-1.16 Agency coordination.** Coordinate with Ventura County Fire Department, Ventura County Sheriff's Office, and Ventura County Office of Emergency Services to ensure effective preparation, response, and recovery services are available throughout the community before, during, and after a seismic event.

- **Policy SE-1.17 Accessible hazard preparedness education and outreach.** Promote hazard preparedness with education and outreach available in multiple languages and formats appropriate for people with access and functional needs.

- **Policy SE-1.18 Ready Ventura County Program.** Coordinate with the Ventura County Sheriff's Office of Emergency Services to update and coordinate the Ready Ventura County Program as relevant to the City of Moorpark.

- **Policy SE-1.19 Livestock and large animal evacuation.** Work with Ventura County Animal Services and Ventura County Office of Emergency Services to ensure that owners of livestock and large animal are prepared for and have the ability to evacuate during an emergency.

Land Use Element

- **Policy LU-1.5 Development timing.** Manage new development and redevelopment to ensure that it is orderly with respect to location, timing, and density/intensity; concurrent with the provision of local public services and facilities; and compatible with the overall community character.

- **Policy LU-3.1 Housing for all residents.** Provide a mix of residential densities to accommodate the housing needs of all members of the community and address Moorpark's fair share of regional housing needs consistent with the Housing Element.

- **Policy LU-3.2 Housing types.** Provide for the development of a diversity of residential product types, lot sizes, and designs, unless determined by the City to be infeasible due to the size of the project.

- **Policy LU-3.3 Broader mix of housing types.** Facilitate the development of mid-range, or "missing middle," housing units such as duplexes, multiplexes, courtyard homes, and townhomes.
- **Policy LU-3.5 Mixed-use development.** Provide for development projects that mix housing with commercial uses to enable Moorpark's residents to live close to businesses and employment, reducing vehicle trips, and supporting social interactions.
- **Policy LU-3.7 Transit-oriented development.** Promote opportunities to develop uses that can economically benefit from their proximity to the Moorpark Metrolink Station and promote increased ridership.
- **Policy LU-3.8 Public services and facilities.** Support a diversity of uses and services supporting Moorpark's residents such as facilities for governance and administration, public safety, seniors and youth, community gatherings, and comparable activities.
- **Policy LU-4.1 Sustainable urban form.** Provide an overall pattern of land uses that promotes efficient development; reduces automobile dependence, greenhouse gas emissions; and consumption of non-renewable resources; ensures compatibility among uses; enhances community livability and health; and sustains economic vitality.
- **Policy LU-4.2 Focused development.** Reinforce existing patterns of development by concentrating development in key centers and districts serving as destinations and gathering places for the community that are linked by pedestrian connections to adjoining residential neighborhoods, such as the downtown High Street corridor, Mission-Bell/Moorpark Town Center, and Moorpark Marketplace.
- **Policy LU-4.3 Residential neighborhoods.** Maintain a development pattern of distinct residential neighborhoods oriented around parks, schools, and community facilities that are connected with neighborhood-serving businesses and public transit.
- **Policy LU-4.4 Multi-family housing.** Promote the development of multiple-family dwellings in close proximity to employment opportunities, shopping areas, public parks, and transit lines, with careful consideration of the proximity to and compatibility with single-family neighborhoods.
- **Policy LU-6.3 Design for safety.** Require that development and public spaces are designed to enhance public safety and discourage crime by providing street-fronting uses, adequate lighting, and features that cultivate a sense of community ownership.
- **Policy LU-9.4 Active transportation.** Promote infrastructure improvements that support active transportation with safe, attractive, and comfortable facilities that meet community needs.
- **Policy LU-17.4 Compatibility with adjoining uses.** Ensure that City-owned buildings, sites, and infrastructure are designed to be compatible in scale, character, and landscape with the district or neighborhood in which they are located, and minimize potential impacts such as traffic, noise, and lighting.

- **Policy LU-19.3 Relationship to transit station**. Locate and design development to capitalize on and reflect its adjacency to the Metrolink station, including developing direct pedestrian connections.

5.17.5 Level of Significance Before Mitigation

Upon implementation of regulatory requirements and standard conditions of approval, the following impacts would be less than significant: 5.17-1, 5.17-2. 5.17-3, and 5.17-4.

5.17.6 Mitigation Measures

No mitigation measures are warranted.

5.17.7 Level of Significance After Mitigation

No significant unavoidable adverse impacts relating to transportation were identified.

5.17.8 References

Iteris, 2022, October 4. Moorpark General Plan Update: Draft CEQA Transportation Impact Analysis Iteris.

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Ventura, County of. 2022, February. Jurisdictional Annexes 2022. Volume 2 of Ventura County Multi-jurisdictional Hazard Mitigation Plan Update. https://vcportal.ventura.org/OES/2022-03-01_VenturaHMP_Vol2_PublicReviewDraft-compressed.pdf.

Ventura County Transportation Commission (VCTC). 2022, September (accessed). Countywide Transportation Plan. https://www.goventura.org/vc-county-comprehensive-transportation-plan/#tab-1576618343-1-53.

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5.18 TRIBAL CULTURAL RESOURCES

Tribal cultural resources include landscapes, sacred places, or objects with cultural value to a California Native American tribe. This section of the Draft Environmental Impact Report (DEIR) evaluates the potential for implementation of the Moorpark General Plan 2050 to impact tribal cultural resources in Moorpark. Other potential impacts to cultural resources (i.e., prehistoric, historic, paleontological, and disturbance of human remains) are evaluated in Section 5.5, *Cultural Resources*. The analysis in this section is based, in part, upon the following information:

- *Cultural Resources Sensitivity Model for the Moorpark General Plan Update, City of Moorpark, Ventura County*, ECORP Consulting, Inc., October 15, 2020.

A complete copy of this report is included as Appendix F2 to this DEIR. Additionally, a compilation of Senate Bill 18 (SB 18)/Assembly Bill 52 (AB 52) tribal consultation letter correspondences received by the City from Native American tribes is provided in Appendix L.

5.18.1 Environmental Setting

5.18.1.1 REGULATORY BACKGROUND

Federal Regulations

Archaeological Resources Protection Act

The Archaeological Resources Protection Act of 1979 regulates the protection of archaeological resources and sites which are on Federal lands and Indian lands.

Native American Graves Protection and Repatriation Act

The Native American Graves Protection and Repatriation Act is a federal law passed in 1990 that provides a process for museums and federal agencies to return certain Native American cultural items, such as human remains, funerary objects, sacred objects, or objects of cultural patrimony, to lineal descendants and culturally affiliated Indian tribes.

State Regulations

California Public Resources Code

Archaeological resources are protected pursuant to a wide variety of state policies and regulations enumerated under the California Public Resources Code (PRC). In addition, cultural resources are recognized as a nonrenewable resource and therefore receive protection under the PRC and CEQA.

- **PRC Sections 5097.9 to 5097.991** provide protection to Native American historical and cultural resources, and sacred sites and identifies the powers and duties of the Native American Heritage Commission (NAHC). It also requires notification of discoveries of Native American human remains to descendants and provides for treatment and disposition of human remains and associated grave goods.

California Health and Safety Code

The discovery of human remains is regulated by California Health and Safety Code Section 7050.5, which states that:

> In the event of discovery or recognition of any human remains in any location other than a dedicated cemetery, there shall be no further excavation…until the coroner…has determined…that the remains are not subject to…provisions of law concerning investigation of the circumstances, manner and cause of any death, and the recommendations concerning the treatment and disposition of the human remains have been made to the person responsible…. The coroner shall make his or her determination within two working days from the time the person responsible for the excavation, or his or her authorized representative, notifies the coroner of the discovery or recognition of the human remains. If the coroner determines that the remains are not subject to his or her authority and…has reason to believe that they are those of a Native American, he or she shall contact, by telephone within 24 hours, the Native American Heritage Commission.

California Senate Bill 18

Existing law provides limited protection for Native American prehistoric, archaeological, cultural, spiritual, and ceremonial places. These places may include sanctified cemeteries, religious, ceremonial sites, shrines, burial grounds, prehistoric ruins, archaeological or historic sites, Native American rock art inscriptions, or features of Native American historic, cultural, and sacred sites.

SB 18 was signed into law in September 2004 and went into effect on March 1, 2005. It placed new requirements on local governments for developments within or near "traditional tribal cultural places" (TTCP). Per SB 18, the law requires local jurisdictions to provide opportunities for involvement of California Native Americans tribes in the land planning process for the purpose of preserving traditional tribal cultural places. The Final Tribal Guidelines recommends that the NAHC provide written information as soon as possible but no later than 30 days to inform the lead agency if the proposed project is determined to be in proximity to a TTCP and another 90 days for tribes to respond to a local government if they want to consult to determine whether the project would have an adverse impact on the TTCP. There is no statutory limit on the consultation duration. Forty-five days before the action is publicly considered by the local government council, the local government refers action to agencies, following the CEQA public review time frame. The CEQA public distribution list may include tribes listed by the NAHC who have requested consultation or it may not. If the NAHC, the tribe, and interested parties agree upon the mitigation measures necessary for the proposed project, they would be included in the project's EIR. If both the City of Moorpark and the tribe agree that adequate mitigation or preservation measures cannot be taken, neither party is obligated to take action.

Per SB 18, a city or county is required to consult with the NAHC and any appropriate Native American tribe prior to the adoption, revision, amendment, or update of a city's or county's general plan. Although SB 18 does not specifically mention consultation or notice requirements for adoption or amendment of specific plans, the Final Tribal Guidelines advises that SB 18 requirements extend to specific plans as well, because

state planning law requires local governments to use the same process for amendment or adoption of specific plans as general plans (defined in Government Code Section 65453). In addition, SB 18 provides a definition of TTCP that requires a traditional association of the site with Native American traditional beliefs, cultural practices, or ceremonies or the site must be shown to actually have been used for activities related to traditional beliefs, cultural practices, or ceremonies. (Previously, the site was defined to require only an association with traditional beliefs, practices, lifeways, and ceremonial activities.) In addition, SB 18 amended Civil Code Section 815.3 and added California Native American tribes to the list of entities that can acquire and hold conservation easements for the purpose of protecting their cultural places.

Assembly Bill 52

AB 52 took effect July 1, 2015, and required inclusion of a new section in CEQA documents titled Tribal Cultural Resources, which includes heritage sites. Under AB 52, a tribal cultural resource (TCR) is defined as a site, feature, place, cultural landscape, sacred place, and object with cultural value to a California Native American tribe that is either included or eligible for inclusion in the California Register of Historic Resources or included in a local register of historical resources. Or the lead agency, supported by substantial evidence, chooses at its discretion to treat the resource as a tribal cultural resource.

Similar to SB 18, AB 52 requires consultation with tribes at an early stage to determine whether the project would have an adverse impact on the TCR and mitigation to protect them. Per AB 52, within 14 days of deciding to undertake a project or determining that a project application is complete, the lead agency must provide formal written notification to all tribes who have requested it. The tribe then has 30 days after receiving the notification to respond if it wishes to engage in consultation. The lead agency must initiate consultation within 30 days of receiving the tribe's request. Consultation concludes when both parties have agreed on measures to mitigate or avoid a significant effect to a tribal cultural resource, or a party, after a reasonable effort in good faith, decides that mutual agreement cannot be reached. Regardless of the outcome of consultation, the CEQA document must disclose significant impacts on tribal cultural resources and discuss feasible alternatives or mitigation that avoid or lessen the impact.

5.18.1.2 EXISTING CONDITIONS

Pre-Contact History and Ethnography

The first inhabitants of southern California were big game hunters and gatherers exploiting extinct species of Pleistocene megafauna (e.g., mammoth and other Rancholabrean fauna). Local "fluted point" assemblages comprised of large spear points or knives are stylistically and technologically similar to the Clovis Paleo-Indian cultural tradition dated to this period elsewhere in North America. Archaeological evidence for this period in southern California is limited to a few small temporary camps with fluted points found around late Pleistocene lake margins in the Mojave Desert and around Tulare Lake in the southern San Joaquin Valley. Single points are reported from Ocotillo Wells and Cuyamaca Pass in eastern San Diego County and from the Yuha Desert in Imperial County.

The study area is in the region occupied by the Chumash before and at the time of European contact. The prehistory of the Chumash region has been divided into three periods: Early (8,000 to 3,350 years before

present [BP]), Middle (3,350 to 800 years BP), and Late (800 to 150 years BP or approximately 1150 to 1800 AD). The Early Period has been divided into three phases: X, Y, and Z. The X Phase is characterized by large flake and core tools, milling stones, and hand stones. Based on limited archaeological data, it appears that Phase X sites along the Santa Barbara Channel were on crests of hills away from the ocean, but some Phase Y sites were on knolls adjacent to sloughs. During Phase Z, sites were on higher ground.

During the Middle Period, increasing sedentism and increasing emphasis on marine subsistence along the Santa Barbara Channel is reflected by the appearance of coastal villages occupied during a large part of the year. The plank canoe, which made ocean fishing and travel to the Channel Islands safer and more efficient, came into use about 1,500 years BP. Use of the plank canoe also promoted trade and exchange between the mainland and the Channel Islands.

The full development of the Chumash occurred during the Late Period. At the time, there was a series of permanent and semipermanent villages with populations of 200 to 600 or more individuals along the Santa Barbara Channel and on the Channel Islands. The principal economic pursuits of the people of these villages were marine fishing and trading.

At the time of the Spanish contact, the Chumash occupied what is now Ventura County; the northwestern corner of Los Angeles County; the southern part of San Luis Obispo County; and the Santa Monica Mountains area of Los Angeles County, Santa Barbara County, and the northern Channel Islands. The Chumash spoke several languages belonging to the Chumashan language family, which is not part of or related to any other North American language family. Artifactual and skeletal evidence indicate that the Chumash have continuously occupied the Ventura and Santa Barbara County areas from before 10,000 years BP to historic times. Linguistic evidence suggests that the Chumash expanded during the first millennium AD into territory previously occupied by Hokan speakers (Salinan) in southern San Luis Obispo County and onto the northern Channel Islands, where an unknown, now extinct, language was spoken.

The Chumash were one of the most socially and economically complex hunting and gathering groups in North America. Chumash Channel–area villages contained circular houses made of willow poles and thatch. A hearth was in the center of each house. In addition to houses, each village contained a sweat house, a sacred council chamber, a dance floor, and a cemetery.

Status differentiation had developed to the point where village chiefs inherited their rank and probably controlled trade and redistribution. Only certain higher-ranking lineages built and operated plank canoes for trade with the islands. Trade and redistribution of products from different environmental zones was facilitated by the use of shell beads as a form of currency, made almost exclusively on the northern Channel Islands. Making microdrills (used to make beads) from island chert sources was a specialized industry.

When the Spanish arrived in 1769, the Chumash occupied the coast from Malibu Canyon to San Luis Obispo and inland as far as the western edge of the San Joaquin Valley. By 1804, most villages were abandoned because the Chumash were forced to move to the missions. Exposure to diseases introduced by Europeans soon began to decimate their population. A typical example is the census kept for La Purisima Mission, where the Chumash declined in number from approximately 1,520 in 1804 to 400 in 1832.

When Spanish authority was removed in 1821, many Chumash left the coastal area and settled in the interior. Those who remained were usually mistreated by Mexican, and later Anglo settlers. European-borne diseases continued to reduce the Chumash population. That, as well as intermarriage with the Spanish, Mexicans, and Anglos, resulted in near extinction of the full-blooded Chumash by 1900. In 1855, a reservation of 120 acres was given to the Chumash near Santa Ynez Mission. This small parcel was eventually reduced to 75 acres, the smallest Native American reservation in California. By the 1970s, only about 40 Chumash of mixed blood remained there. Other Chumash with no formal tribal affiliation live outside the reservation.

Native American Heritage Commission

The NAHC conducted a sacred lands file search for the project site and identified 12 local representatives from Native American groups as potentially having local knowledge:

- Barbareno/Ventureno Band of Mission Indians
- Chumash Council of Bakersfield
- Coastal Band of the Chumash Nation
- Fernandeno Tataviam Band of Mission Indians
- Gabrieleno Band of Mission Indians - Kizh Nation
- Gabrieleno/Tongva San Gabriel Band of Mission Indians
- Gabrielino/Tongva Nation
- Gabrielino Tongva Indians of California Tribal Council
- Gabrielino-Tongva Tribe
- Northern Chumash Tribal Council
- San Luis Obispo County Chumash Council
- Santa Ynez Band of Chumash Indians

The City notified all the tribal representatives about the proposed project on Tuesday, May 17, 2022, and asked for information about potential resources at or near the project site. The City received responses from Santa Ynez Band of Chumash Indians and Fernandeno Tataviam Band of Mission Indians, but only Fernandeno Tataviam Band of Mission Indians requested consultation. The City met with a representative of the Fernandeno Tataviam Band of Mission Indians on July 7, 2022. The Tribe requested that the Moorpark General Plan 2050 indicate that the Fernandeno Tataviam Band of Mission Indians request to be notified and consulted on issues related to land use, housing, open space, conservation, and recreation.

5.18.2 Thresholds of Significance

According to Appendix G of the CEQA Guidelines, a project would normally have a significant effect on the environment if the project would:

TCR-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 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.

5.18.3 Environmental Impacts

The applicable thresholds are identified in brackets after the impact statement.

Impact 5.18-1: The proposed project could impact tribal cultural resources within Moorpark. [Threshold TCR-1]

Section 5.5, *Cultural Resources*, identifies the 52 previously recorded resources in Moorpark (including 20 precontact resources and 1 multicomponent resource that includes both historical and precontact archaeological deposits). Figure 5.5-2, *Archaeological Sensitivity Map*, in Section 5.5 depicts the sensitivity of archaeological resources in Moorpark.

Conducting consultation early in the CEQA process allows tribal governments, public lead agencies, and project proponents to discuss the level of environmental review, identify and address potential adverse impacts to tribal cultural resources, and reduce the potential for delay and conflict in the environmental review process.

Sacred Lands File Search and Consultation

The City requested a Sacred Lands File search and a local government tribal consultation list from the NAHC on June 17, 2020, in accordance with SB 18 and AB 52 requirements. The NAHC responded on June 18, 2020, and notified the City that the result of the Sacred Lands File search was negative. The NAHC also provided a list of tribes for the City to contact regarding potential consultation. The City sent initial notification letters to California Native American tribes and tribal contacts on May 17, 2022, via certified mail.

SB 18 and AB 52 Consultation

In accordance with AB 52 and SB 18 requirements, the City sent invitation letters to the Native American contacts provided by the NAHC on May 17, 2022, formally inviting tribes to consult with the City on the General Plan update. The intent of consultations is to provide an opportunity for interested Native American contacts to work with the City during the project planning process to identify and protect TCRs. Response letters were received from the following tribes (see also Appendix L).

- **Santa Ynez Band of Chumash Indians.** The Santa Ynez Band of Chumash Indians responded on May 24, 2022, that the Tribal Elders' Council for the Santa Ynez Band of Chumash Indians requests no further consultation on the proposed project.

- **Fernandeno Tataviam Band of Mission Indians.** Fernandeno Tataviam Band of Mission Indians responded on June 22, 2022, requesting consultation to discuss the proposed project, incorporation of tribal perspectives into environmental documents, and management protocols that are inclusive of tribes. As requested, the City of Moorpark consulted with Fernandeno Tataviam Band of Mission Indians on July 7, 2022. The Tribe requested that the Moorpark General Plan 2050 indicate that the Fernandeno Tataviam Band of Mission Indians request to be notified and consulted on issues related to land use, housing, open space, conservation, and recreation.

Future development as a result of the implementation of the Moorpark General Plan 2050 could include grading in portions of the city with sensitivity to tribal cultural resources. Grading and construction activities of undeveloped areas or redevelopment that requires more intensive soil excavation than in the past could potentially cause disturbance to TCRs. Therefore, future development could potentially unearth previously unknown/unrecorded TCRs.

The Conservation Element of the Moorpark General Plan 2050 includes the following policy that has the potential to reduce impacts of potential development on tribal cultural resources:

- **Policy COS-3.5 Paleontological and archaeological resources.** Require new development to protect and preserve paleontological and archaeological resources from destruction, and avoid and minimize impacts to such resources in accordance with the requirements of CEQA.

The Moorpark General Plan 2050 is a regulatory document that sets the framework for future growth and development in the City and does not result in development in and of itself. Before any development or redevelopment activities can occur, they must be analyzed for conformance with the General Plan and other local, state, and federal requirements, and they must comply with the requirements of CEQA. While policies in the Moorpark General Plan 2050 would minimize impacts to tribal cultural resources from new development and/or redevelopment, ground-disturbing activities have the potential to impact tribal cultural resources in the City.

Level of Significance Before Mitigation: Potentially significant.

5.18.4 Relevant General Plan Policies

Conservation Element

- **Policy COS-3.5 Paleontological and archaeological resources.** Require new development to protect and preserve paleontological and archaeological resources from destruction, and avoid and minimize impacts to such resources in accordance with the requirements of CEQA.

5.18.5 Level of Significance Before Mitigation

Upon implementation of regulatory requirements and standard conditions of approval, the following impacts would be less than significant: 5.18-1.

Without mitigation, the following impacts would be **potentially significant:**

- **Impact 5.18-1** Tribal cultural resources could be adversely impacted by grading activities associated with the proposed project.

5.18.6 Mitigation Measures

Mitigation Measure CUL-5 from Section 5.5, *Cultural Resources*, for archeological resources is also applicable to tribal cultural resources.

Impact 5.18-1

TCR-1 **Tribal Cultural Resources Monitoring**. An archeologist that meets the Secretary of the Interior's Professional Qualified Standards (PQS), in consultation with interested tribes, the developer and the City of Moorpark, shall develop an Archaeological Monitoring Plan (AMP) to address the details, timing and responsibility of archaeological and cultural activities that will occur on the project site. Details in the AMP shall include:

1. Project-related ground disturbance (including, but not limited to, brush clearing, grading, trenching, etc.) and development scheduling.

2. The development of a rotating or simultaneous schedule in coordination with the developer and the project archeologist for designated Native American Tribal Monitors from the consulting tribes during grading, excavation and ground disturbing activities on the site: including the scheduling, safety requirements, duties, scope of work, and Native American Tribal Monitors' authority to stop and redirect grading activities in coordination with all project archaeologists (if the tribes cannot come to an agreement on the rotating or simultaneous schedule of tribal monitoring, the Native American Heritage Commission shall designate the schedule for the on-site Native American Tribal Monitor for the proposed project).

3. The protocols and stipulations that the developer, City, Tribes, and project archaeologist will follow in the event of inadvertent cultural resources discoveries, including any newly discovered cultural resource deposits that shall be subject to a cultural resources evaluation.

At least 30 days prior to application for a grading permit and before any grading, excavation, and/or ground-disturbing activities on the site take place, the future developer shall retain a tribal cultural monitor to monitor all ground-disturbing activities in an effort to identify any unknown archaeological resources.

Pursuant to the AMP, a tribal monitor from the consulting tribe shall be present during the initial grading activities. If tribal resources are found during grubbing activities, the tribal monitoring shall be present during site grading activities.

TCR-2 **Treatment and Disposition of Cultural Resources.** In the event that Native American cultural resources are inadvertently discovered during the course of any ground-disturbing activities, including but not limited to brush clearance, grading, and trenching for the proposed project, the following procedures will be carried out for treatment and disposition of the discoveries:

1. Temporary Curation and Storage: During the course of construction, all discovered resources shall be temporarily curated in a secure location on-site or at the offices of the project archaeologist. The removal of any artifacts from the project site will need to be thoroughly inventoried with tribal monitor oversite of the process; and

2. Treatment and Final Disposition: The landowner(s) shall relinquish ownership of all cultural resources, including sacred items, burial goods, and all archaeological artifacts and nonhuman remains as part of the required mitigation for impacts to cultural resources. The applicant shall relinquish the artifacts through one or more of the following methods and provide the City of Moorpark with evidence of same:

    a. Accommodate the process for on-site reburial of the discovered items with the consulting Native American tribes or bands. This shall include measures and provisions to protect the future reburial area from any future impacts. Reburial shall not occur until all cataloguing, basic analysis, and other analyses as recommended by the project archaeologist and approved by consulting tribes and basic recordation has been completed; all documentation should be at a level of standard professional practice to allow the writing of a report of professional quality;

    b. A curation agreement with an appropriate qualified repository within San Bernardino County that meets federal standards per 36 CFR Part 79 and therefore would be professionally curated and made available to other archaeologists/researchers for further study. The collections and associated records shall be transferred, including title, to an appropriate curation facility within San Bernardino County, to be accompanied by payment of the fees necessary for permanent curation.

    c. For purposes of conflict resolution, if more than one Native American tribe or band is involved with the project and cannot come to an agreement as to the disposition of cultural materials, they shall be curated at a regional museum, as directed by City Council.

    d. At the completion of grading, excavation, and ground-disturbing activities on the site, a Phase IV Monitoring Report shall be submitted to the City that documents

monitoring activities conducted by the project archaeologist and Native Tribal Monitors within 60 days of completion of grading. This report shall document the impacts to the known resources on the property; describe how each mitigation measure was fulfilled; document the type of cultural resources recovered and the disposition of such resources; provide evidence of the required cultural sensitivity training for the construction staff held during the required pre-grade meeting; and, in a confidential appendix, include the daily/weekly monitoring notes from the archaeologist. All reports produced will be submitted to the City, County Museum, and consulting tribes.

TCR-3 During construction activities, the project applicant shall allow additional archaeological monitors of Native American tribes to access the project site on a volunteer basis to monitor grading and excavation activities.

5.18.7 Level of Significance After Mitigation

Impact 5.18-1

Policies in the Moorpark General Plan 2050 as well as Mitigation Measures TCR-1 through TCR-3 and Mitigation Measure CUL-5 would reduce potential impacts associated with tribal cultural resources to a level that is less than significant. Therefore, no significant unavoidable adverse impacts relating to tribal cultural resources have been identified.

5.18.8 References

ECORP Consulting, Inc. 2020, October 15. *Cultural Resources Sensitivity Model for the Moorpark General Plan Update, City of Moorpark, Ventura County.*

5.19 UTILITIES AND SERVICE

This section of the Draft Program Environmental Impact Report (DEIR) evaluates the potential impacts of the proposed Moorpark General Plan 2050 to utility and service systems in the city. The section addresses wastewater treatment and collection, water supply and distribution, storm drainage, solid waste, and electricity and natural gas services. Evaluation of wasteful, inefficient energy use is evaluated in Section 5.6, *Energy*.

The analysis in this section is based in part on the following technical report:

- *Moorpark Infrastructure CEQA Technical Report,* Fuscoe, September 30, 2022.

A complete copy of this study is included as Appendix H to this Draft EIR.

5.19.1 Wastewater Treatment and Collection

5.19.1.1 ENVIRONMENTAL SETTING

Regulatory Background

Federal

Clean Water Act

The federal Clean Water Act (CWA), United States Code, Title 33, Sections 1251 et seq. establishes regulations to control the discharge of pollutants into the waters of the United States and regulates water quality standards for surface waters. Under the CWA, the US Environment Protection Agency (EPA) is authorized to set wastewater standards for industry and runs the National Pollutant Discharge Elimination System (NPDES) permit program. Under the NPDES program, permits are required for all new developments that generate discharges that go directly into Waters of the United States. Additionally, Sections 1251 et seq. of the CWA requires wastewater treatment of all effluent before it is discharged into surface waters.

National Pollutant Discharge Elimination System

Under the NPDES program (under Section 402 of the CWA), all facilities that discharge pollutants from any point source into waters of the United States must have a NPDES permit. The term "pollutant" broadly applies to any type of industrial, municipal, and agricultural waste discharged into water. Point sources can be publicly owned treatment works (POTW), industrial facilities, and urban runoff. The NPDES program addresses certain agricultural activities, but the majority are considered nonpoint sources and are exempt from NPDES regulation. Direct sources discharge directly to receiving waters, and indirect sources discharge to POTWs, which in turn discharge to receiving waters. Under the national program, NPDES permits are issued only for direct, point-source discharges. The National Pretreatment Program addresses industrial and commercial indirect dischargers. Municipal sources are POTWs that receive primarily domestic sewage from residential and commercial customers. Specific NPDES program areas applicable to municipal sources are the National Pretreatment Program, the Municipal Sewage Sludge Program, Combined Sewer Overflows, and the Municipal Storm Water Program. Nonmunicipal sources include industrial and commercial facilities. Specific NPDES program areas applicable to these industrial/commercial sources are: Process Wastewater Discharges, Non-

process Wastewater Discharges, and the Industrial Storm Water Program. NPDES issues two basic permit types: individual and general. Also, the EPA has recently focused on integrating the NPDES program further into watershed planning and permitting.

State

State Water Resources Control Board: Statewide General Waste Discharge Requirements

The General Waste Discharge Requirements specify that all federal and state agencies, municipalities, counties, districts, and other public entities that own or operate sanitary sewer systems greater than one mile in length that collect and/or convey untreated or partially treated wastewater to a publicly owned treatment facility in the State of California need to develop a sewer master plan. The plan evaluates existing sewer collection systems and provides a framework for undertaking the construction of new and replacement facilities to maintain proper levels of service. The master plan includes inflow and infiltration studies to analyze flow monitoring and water use data, a capacity assurance plan to analyze the existing system with existing land use and unit flow factors, a condition assessment and sewer system rehabilitation plan, and a financial plan with recommended capital improvements and financial models.

General Pretreatment Regulations for Existing and New Sources of Pollution

The General Pretreatment Regulations establish responsibilities of the federal, state, and local government; industry; and the public to implement National Pretreatment Standards to control pollutants that pass through or interfere with treatment processes in POTWs or that may contaminate sewage sludge. Pretreatment standards are pollutant discharge limits that apply to industrial users.

California Green Building Standards Code

The residential provisions of the California Green Building Standards Code (CALGreen) outline planning, design, and development methods that include environmentally responsible site selection, building design, and building siting and development to protect, restore, and enhance the environmental quality of the site and respect the integrity of adjacent properties. The code also establishes the means of conserving water used indoors, outdoors, and in wastewater conveyance; outlines means of achieving material conservation and resource efficiency; and outlines means of reducing the quantity of air contaminants.

Regional

Ventura County Waterworks District No. 1 Moorpark Wastewater Treatment Plant NPDES Permit

Wastewater discharge requirements for Ventura County Waterworks District (VCWD) No. 1 Moorpark Wastewater Treatment Plant are detailed in Order No. R4-2003-0151. The permit includes the conditions needed to meet minimum applicable technology-based requirements. The permit includes limitations more stringent than applicable federal technology-based requirements where necessary to achieve the required water quality standards.

Ventura County Waterworks Districts Rules and Regulations

Part 7 of VCWD's Rules and Regulations details requirements associated with connection fees and sewer charges. Connection fees are collected at the time of issuance of a sewer will-serve letter and after a project has received tentative approval from the appropriate legislative body. Part 7 also includes construction standards and permit requirements for the construction of private sewers. A written permit from VCWD needs to be obtained before connecting with, using, altering, or disturbing any public sewer or appurtenance, or performing any work on the drainage system.

Part 8 of VCWD's Rules and Regulations controls and regulates wastewater discharges into the sewer system. This part enables VCWD to comply with all applicable federal and State laws, including the federal CWA and the pretreatment regulations in the Code of Federal Regulations.

Local

Moorpark Municipal Code

Chapter 15.14, Plumbing Code: This article of the municipal code incorporates the 2019 California Plumbing Code by reference.

5.19.1.2 EXISTING CONDITIONS

Wastewater Collection System

The sewer system in the city is maintained by the special district of VCWD No. 1. Figure 5.19-1, *Existing Sewer Facilities*, shows VCWD No. 1's existing sewer system network. The City sewer system consists of seven sewer pump stations and associated force mains, one wastewater treatment plant, standard and trunk manholes, and an approximately 368-mile network of gravity sewer pipes ranging from 4 inches to 30 inches in diameter. Most of the VCWD No. 1's sewer network consists of pipes that are 16 inches in diameter and less.

Existing Sewer Flows

For existing conditions, water demands were calculated by reviewing VCWD No. 1's Urban Water Management Plan's (UWMP) retail water demands for 2020. Dividing the retail water demands in the UWMP by the land use totals shown in Table 3-1, *Existing Land Use Summary*, resulted in the existing per capita water use factors of 160 gallons per capita per day (gpcd) for single-family residential, 66 gpcd for multi-family residential, and 0.12 gpd per square foot for nonresidential square feet. Anticipated sewer flows and demands were calculated by applying a factor of 0.8 to the water demands. This methodology is considered conservative in estimating sewer flows. In addition, sewer flows will likely be less due to implementation of future recycled water distribution lines and use, which will offset potable water demands and subsequent sewer flows.

Table 5.19-1, *Existing Sewer Flows*, provides a summary of the existing wastewater flows. Refer to the Moorpark Infrastructure CEQA Technical Report (Appendix H) for detailed sewer flow calculations. Under the existing conditions, average daily sewer flows are estimated at 4.9 million gallons per day (mgd) throughout the city.

Table 5.19-1 Moorpark General Plan 2050 Water Demand

Proposed Land Use	Increase in Number Dwelling Units	Increase in Non-Residential Square Footage	Persons per Dwelling Unit	Water Demand Factor	Increase in Water Demand (gpd)	Increase Water Demand (afy)
SFR	1,459	–	3.23	135 gpcd	636,197	713
MFR	4,030	–	3.23	60 gpcd	781,014	875
Nonresidential	–	4,783,912	–	0.09 gpd/SF	430,552	482
					Net Increase	**2,069**
					Existing	**6,869**
					Total	**8,938**

Source: Fuscoe 2022
Notes: gpd = gallons per day; SFR = single-family residential; MFR = multifamily residential; afy = acre-fee per year

Wastewater Treatment

VCWD No. 1 owns and operates one wastewater treatment plant, the Moorpark Water Reclamation Facility (MWRF), and the effluent produced meets criteria for California Title 22 reuse. The MWRF was originally constructed as a secondary treatment plant in 1965 and is just west of the city limits along SR-118. The plant began supplying Title 22 recycled water for golf course irrigation in 2003 when tertiary treatment facilities were constructed. There are eight active recycled water customers, including the plant itself, and the plant produced 599 acre-feet (af) of recycled water in 2015. As of 2015, the MWRF has a total treatment capacity of 5.0 mgd (or 5,600 acre-feet per year [afy]) and a tertiary treatment capacity of 1.5 mgd (1,680 afy). The plant is required to annually discharge a minimum 0.76 mgd (850 afy) of its treated effluent to percolation basins for groundwater recharge.

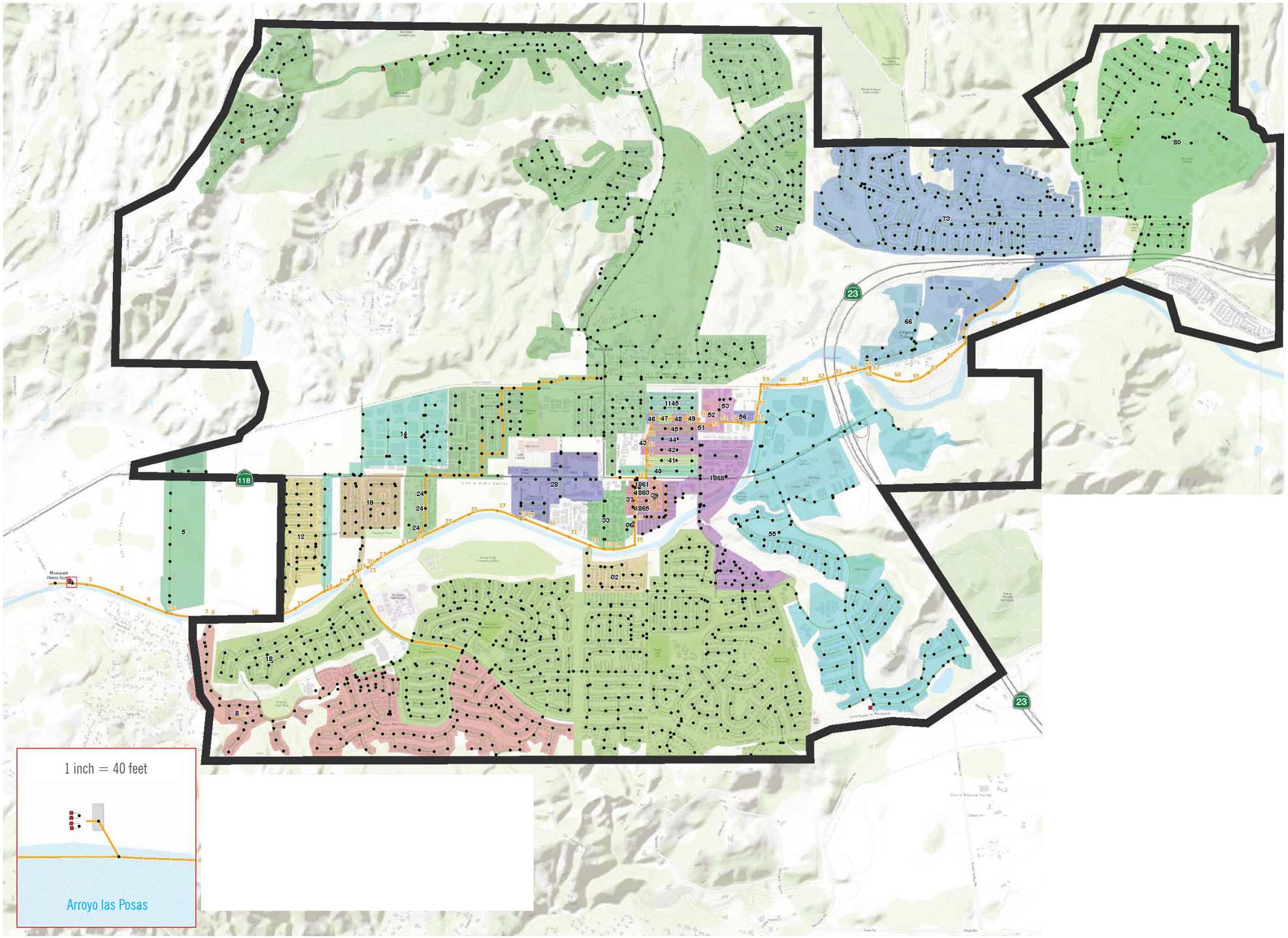
The wastewater flow within the system was approximately 2 mgd in 2015, resulting in an available capacity of 3 mgd. VCWD anticipates the need to expand the plant's tertiary treatment capacity so that recycled water supply will reach 1.96 mgd by 2040 to accommodate the need from a growing customer base (2,200 afy). Existing recycled water distribution in 2021 totaled 1,018 afy, which would result in a new recycled water availability of 1,182 afy.

Existing Sewer Capacity Assessment

VCWD requires that new development and redevelopment projects install sewer flow-monitoring devices upstream and downstream of the project's proposed point of connection to ensure there is adequate capacity in the sewer main or trunk line for the additional flow from the new project. Project-by-project monitoring of sewer flow capacity currently ensures that the sewer system is functioning efficiently and effectively for VCWD's service area and customers. VCWD No. 1 also requests water and sewer hydraulic reports and improvement plans for plan check for projects going through the entitlement process.

Figure 5.19-1

Existing Sewer Facilities



District 1 Wastewater Drainage Basins

Pump

Manhole
- Standard
- Trunk

Gravity Main
- <=16"
- >=18"

5	45
8	46
12	47
14	48
18	49
19	51
24	52
28	53
32	55
33	56
36	66
37	73
39	80
40	1,145
41	1,861
42	1,863
43	1,865
44	1,868

City of Moorpark Boundary

MADE BY MOORPARK General Plan 2050

Draft Environmental Impact Report

0 1,000 2,000 4,000 FT

Source: PlaceWorks, 2022

Date: 10/31/2022

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VCWD No. 1 includes sewer system upgrade projects on the capital improvement project (CIP) list as needed. The CIP list prioritizes projects based on system needs and phasing. It acts as a long-term planning tool to facilitate construction of recommended projects to keep pace with city growth and demands. There is currently one sewer system project within city limits on the CIP list for the years 2019 to 2024, as shown in Table 5.19-2, *VCWD No. 1 CIP Projects Planned for 2019–2024*, and Figure 5.19-2, *Existing Sewer System Improvement Projects*. In addition, there are several ongoing project-based sewer improvements associated with various land development projects as well as improvements to other sewer infrastructure outside of the city limits.

Table 5.19-2 VCWD No. 1 CIP Projects Planned for 2019–2024

Item Name	Description	2020 Updates from County Waterworks District
Sewer Replacement and Relining	Replacement and relining of sewer lines near Los Angeles Ave.	No new updates since 2019-2020 CIP

Source: Fuscoe 2022.

5.19.1.3 THRESHOLDS OF SIGNIFICANCE

According to Appendix G of the CEQA Guidelines, a project would normally have a significant effect on the environment if the project would:

U-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.

U-3 Result in a determination by the waste water 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.

5.19.1.4 ENVIRONMENTAL IMPACTS

Methodology

To determine whether development pursuant to the Moorpark General Plan 2050 would exceed the capacity of VCWD No. 1's sewer system and the treatment capacity of the MWRF, existing and future sewer generation flows were calculated. For proposed land uses, updated water demand factors from the Hitch Ranch 2020 Water Supply Assessment were utilized for residential land uses. These updated wastewater demand factors were provided by VCWD No. 1. The water use factors account for residential water conservation requirements and green building code efficiencies. The nonresidential demand factor for proposed land use reduces the 2020 existing nonresidential demand from the UWMP by 20 percent to account for efficiencies in new developments per green building code requirements. The updated factors were applied to the proposed residential units and nonresidential square feet as shown in Table 3-4, *Proposed Land Use Summary*. A total increase of 5,488 dwelling units and increase of approximately 4,783,912 square feet of nonresidential uses are proposed. Anticipated

increases in sewer flows are calculated by applying a factor of 0.8 to water demands. For details on the wastewater generation calculations for Moorpark, see Appendix H.

Impact Analysis

The following impact analysis addresses thresholds of significance for which the Initial Study disclosed potentially significant impacts. The applicable thresholds are identified in brackets after the impact statement.

Impact 5.19-1: Development pursuant to the Moorpark General Plan 2050 could require or result in the relocation or construction of new or expanded wastewater facilities; however, their construction or relocation would not cause significant environmental effects. [Threshold U-1]

There is an overall increase in sewer flows under the Moorpark General Plan 2050 that results from the increase in residential dwelling units and nonresidential square feet across the city.

The proposed increase in sewer flows is shown in Table 5.19-3, *Projected Sewer Flows* (see Appendix H for a detailed breakdown of projected water and sewer flows throughout the city). The MWRF has additional capacity for 3 mgd. At development capacity the Moorpark General Plan 2050 proposes an increase in sewer flows of 1.5 mgd, which is well within the excess treatment capacity of the MWRF.

Table 5.19-3 Projected Increase in Sewer Flows

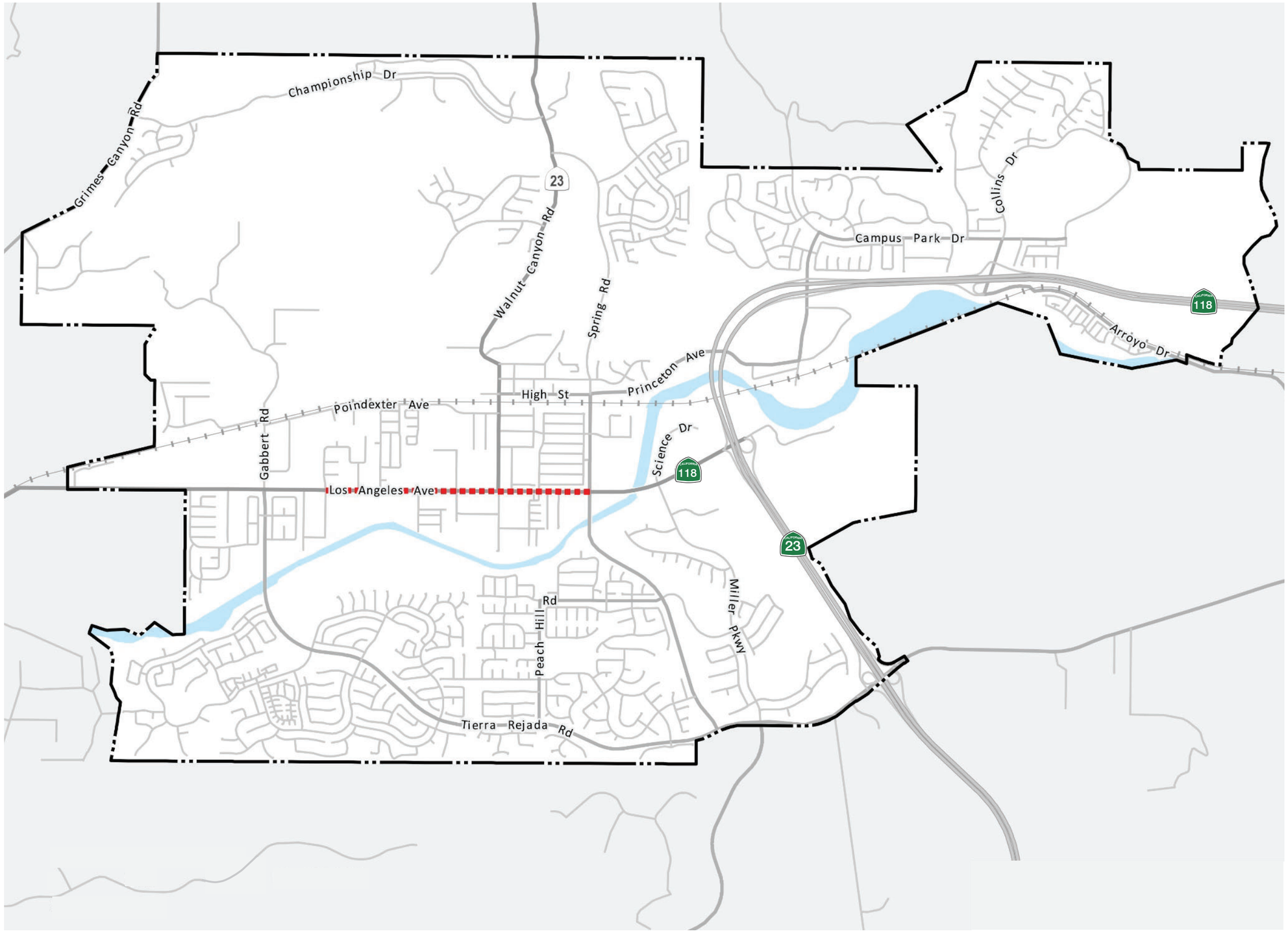
Proposed Land Use	Increase in Dwelling Units	Nonresidential Square Feet	Increase in Sewer Generation (gpd)	Increase in Sewer Generation (mgd)
SFR	1,459	–	508,958	0.5
MFR	4,030	–	624,811	0.6
Nonresidential	–	4,783,912	344,442	0.3
Net Increase	**5,489**	**4,783,912**	**1,478,210**	**1.5**

Source: Fuscoe 2022
Notes: gpd = gallons per day ; mgd = million gallons per day, gpcd = gallons per capita per day; SF = square feet; SFR = single-family residential; MFR = multifamily residential

Sewer improvement projects in the city that are in VCWD No. 1's 2023 to 2027 CIP cycle include one sewer relining project within Los Angeles Avenue. Because this is a relining project, not a capacity project, there are no anticipated impacts from proposed development within the upstream area. In addition, if any new deficiencies were identified, VCWD has policies in place to prioritize improvement projects in their current CIP processes. VCWD is also involved on a project-by-project basis. It actively tracks development projects and requires sewer capacity studies for any project in the city that goes through the entitlement process. The City schedules development review committee meetings with all reviewing and permitting departments, including VCWD, for proposed developments going through the entitlement process. VCWD may also the request sewer hydraulic reports and improvement plans for plan check. This process allows VCWD to track capacity of the sewer system throughout the city.

Figure 5.19-2

Existing Sewer System Improvement Projects



City of Moorpark Boundary

Los Angeles Ave Hot Spot Sewer Relining

MADE BY MOORPARK General Plan 2050

Draft Environmental Impact Report

0 1,000 2,000 4,000 Feet

Source: Fuscoe, 2020

Date: 11/1/2022

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Policies LU-1.4, LU-1.5, and LU-17.8 of the proposed Land Use Element and Policies CI-10.2, CI-11.1, CI-11.2, and CI-11.3 of the proposed Circulation Element promote the coordinated timing of future development and redevelopment with existing and planned infrastructure to ensure public facilities would not be adversely impacted. These policies also encourage investment in infrastructure and capital improvements to facilitate redevelopment, infill development, and new development that is consistent with the proposed Land Use Plan.

Construction impacts associated with private wastewater infrastructure to support development throughout the city would primarily be confined to trenching for miscellaneous utility lines and connections to public infrastructure. Installation of wastewater infrastructure would be limited to on-site wastewater distribution and minor off-site work associated with connections to the public main. No upgrades to the public main are anticipated. Any work that may affect services to the existing sewer lines would be coordinated with the City and VCWD. Moreover, construction impacts are of a relatively short duration and would cease once the installation is complete.

Therefore, proposed development pursuant to the Moorpark General Plan 2050 would have a less than significant impact on wastewater facilities.

Level of Significance Before Mitigation: Less than significant.

Impact 5.19-2: Wastewater generated by development pursuant to the Moorpark General Plan 2050 could be adequately treated by the wastewater service provider for the project. [Threshold U-3]

Buildout of the Moorpark General Plan 2050 would result in an increase in sewer flows of approximately 1.5 mgd, which could impact the existing wastewater treatment capacity of the MWRF. The MWRF has a treatment capacity of 5 mgd. As of 2015, the existing wastewater flow to the MWRF was 2 mgd, resulting in an available additional capacity of 3 mgd. Therefore, the development pursuant to the Moorpark General Plan 2050 would not exceed the available wastewater treatment capacity of the MWRF. Additionally, all development pursuant to the Moorpark General Plan 2050 would need to abide by the requirements of CALGreen and Chapter 15.14 of the City's municipal code, which results in an increase in water efficiency for new development.

To ensure the quality of wastewater conveyed to the wastewater treatment plant does not cause any impacts, development would need to abide by the requirements of VCWD's Rules and Regulations Part 7 and 8, and the wastewater discharge requirements of the NPDES permit (Order No. R4-2003-0151). All industrial development would abide by the requirements of the General Pretreatment Regulations. Thus, wastewater generated through development in accordance with the Moorpark General Plan 2050 would have a less-than-significant impact on VCWD's wastewater treatment facilities.

Level of Significance Before Mitigation: Less than significant.

5.19.1.5 RELEVANT GENERAL PLAN POLICIES

Land Use Element

- **Policy LU-1.4 Public services to support growth.** Coordinate new development and redevelopment of existing properties to ensure that the existing and planned capacity of public facilities and services shall not be adversely impacted.
- **Policy LU-1.5 Development timing.** Manage new development and redevelopment to ensure that it is orderly with respect to location, timing, and density/intensity; concurrent with the provision of local public services and facilities; and compatible with the overall community character.
- **Policy LU-17.8 Equitable access to infrastructure.** Support equitable access to a full complement of critical infrastructure and utilities for all residents and business.

Circulation Element

- **Policy CI-10.2 Adequate capacity.** Continue to coordinate with the District to ensure wastewater infrastructure is effectively serving existing customers and has adequate capacity to provide for new demands on the infrastructure system.

Economic Development Element

- **Policy ED-4.3 Infrastructure and capital improvements.** Invest in infrastructure and capital improvements that facilitate redevelopment, infill development, and new development that is consistent with the Land Use Plan, as funding is available.
- **Policy ED-5.2 Downtown infrastructure.** Ensure that sufficient infrastructure is provided to support the types of uses planned for the Downtown area, including an actionable plan for such upgrades.

5.19.1.6 LEVEL OF SIGNIFICANCE BEFORE MITIGATION

Upon implementation of regulatory requirements and standard conditions of approval, the following impacts would be less than significant: 5.19-1 and 5.19-2.

5.19.1.7 MITIGATION MEASURES

No mitigation measures required.

5.19.1.8 LEVEL OF SIGNIFICANCE AFTER MITIGATION

Impacts 5.19-1 and 5.19-2 are less than significant.

5.19.2 Water Supply and Distribution

5.19.2.1 ENVIRONMENTAL SETTING

Regulatory Background

Federal

Safe Drinking Water Act

The federal Safe Drinking Water Act is enforced by the EPA; it sets standards for drinking water quality and oversees the states, localities, and water suppliers who implement those standards. It also requires actions to protect drinking water and its sources, which include rivers, lakes, and groundwater.

State

California Urban Water Management Planning Act

The Urban Water Management Planning Act requires urban water suppliers to prepare a UWMP if they provide water for municipal purposes to more than 3,000 customers or provide more than 3,000 afy of water. The intent of the UWMP is to assist water supply agencies in water resource planning given their existing and anticipated future demands. The UWMP must include a water supply and demand assessment that compares total water supply available to the water supplier with the total projected water use over a 20-year period. It is also mandatory to update UWMPs every five years.

Sustainable Groundwater Management Act

The Sustainable Groundwater Management Act—collectively, Assembly Bill 1739, Senate Bill 1168, and Senate Bill 1319—was passed in 2014 and defines sustainable groundwater measures. The legislation provides guidance for groundwater management and identifies undesirable results of groundwater withdrawal. The plan is intended to ensure sustainability measures are used in all groundwater activities.

Senate Bills 610 and 221

Senate Bill 610 (SB 610) (2001) amended the California Urban Water Management Planning Act, Sections 10610 et seq. of the California Water Code. It mandates that a city or county approving certain projects subject to CEQA (i) identify any public water system that may supply water for the project, and (ii) request those public water systems to prepare a specified water supply assessment.[1] The assessment is to include the following:

1. A discussion of whether the public water system's total projected water supplies available during normal, single dry, and multiple dry water years during a 20-year projection would meet the projected water demand associated with the proposed project, in addition to the public water system's existing and planned future uses, including agricultural and manufacturing uses.

[1] Under Water Code Section 10912(a)(7), SB 610 applies to a CEQA project that "would demand an amount of water equivalent to, or greater than, the amount of water required by a 500-dwelling unit project."

2. The identification of existing water supply entitlements, water rights, or water service contracts relevant to the identified water supply for the proposed project and water received in prior years pursuant to those entitlements, rights, and contracts.

3. A description of the quantities of water received in prior years by the public water system under the existing water supply entitlements, water rights, or water service contracts.

4. A demonstration of water supply entitlements, water rights, or water service contracts by the following means:

5. The identification of other public water systems or water service contract holders that receive a water supply or have existing water supply entitlements, water rights, or water service contracts, to the same source of water as the public water system.

6. Additional information is required if groundwater is included in the supply for the proposed project.

The water supply assessment shall be included in any environmental document prepared for the project. The assessment may include an evaluation of any information included in that environmental document. A determination shall be made whether the projected water supplies would be sufficient to satisfy the demands of the project, in addition to existing and planned future uses.

Additionally, SB 610 requires new information to be included as part of a UWMP if groundwater is identified as a source of water available to the supplier. Information must include a description of all water supply projects and programs that may be undertaken to meet total projected water use. SB 610 prohibits eligibility for funds from specified bond acts until the plan is submitted to the state.

Furthermore, SB 221 requires written verification that there is sufficient water supply available for applicable new residential subdivisions. The verification must be provided before commencement of construction.

The Water Conservation Act of 2009 (Senate Bill X7-7)

The Water Conservation Act of 2009, SB X7-7, requires all water suppliers to increase water use efficiency. The legislation sets an overall goal of reducing per capita water use by 20 percent by 2020, with an interim goal of a 10 percent reduction in per capita water use by 2015. Effective in 2016, urban retail water suppliers who do not meet the water conservation requirements established by this bill are not eligible for state water grants or loans. SB X7-7 requires that urban water retail suppliers determine baseline water use and set reduction targets according to specified standards; it also requires that agricultural water suppliers prepare plans and implement efficient water management practices.

20x2020 Water Conservation Plan

The 20x2020 Water Conservation Plan of 2010 was a byproduct of the Water Conservation Act of 2009. The plan had a threefold effect, establishing: 1) a benchmark of current usage per capita off 2005 baseline data; 2) an intermediate goal for all water providers to meet by 2015; and 3) a 20 percent reduction by 2020 of water usage.

Assembly Bill 1668 and Senate Bill 606

On May 31, 2018, Governor Brown signed AB 1668 and SB 606, which established long-term standards for water suppliers. The bills called for the creation of new urban efficiency standards for indoor use, outdoor use, and water lost to leaks as well as any appropriate variances for unique local conditions. The State Water Resources Control Board (SWRCB) adopted indoor water use standards by regulation. The indoor water use standard was established at 55 gallons per person per day until January 2025; the standard will become stricter over time, decreasing to 50 gallons per person per day in January 2030. The outdoor water use standard will be based on land cover, climate, and other factors determined by the Department of Water Resources (DWR) and the SWRCB. The SWRCB is in the process of adopting the water leaks standard and the outdoor standard.

Mandatory Water Conservation

Following the declaration on July 15, 2014, of a state of emergency due to drought conditions, the SWRCB adopted Resolution No. 2014-0038 for emergency regulation of statewide water conservation efforts. These regulations, which went into effect on August 1, 2014, were intended to reduce outdoor urban water use and persuade all California households to voluntarily reduce their water consumption by 20 percent. Water companies with 3,000 or more service connections were required to report monthly water consumption to the SWRCB. The SWRCB readopted the regulations several times until Governor Brown issued Executive Order B-40-17 in April 2017, ending the drought emergency and directing the SWRCB to rescind portions of its existing drought emergency water conservation regulations but maintain the portions that prohibit wasteful water use practices until permanent requirements are in place. The prohibitions that are still in effect address: 1) the application of potable water to outdoor landscapes in a manner that causes excess runoff; 2) the use of a hose to wash a motor vehicle except where the hose is equipped with a shut-off nozzle; 3) the application of potable water to driveways and sidewalks; 4) the use of potable water in nonrecirculating ornamental fountains; and 5) the application of potable water to outdoor landscapes during and within 48 hours after measurable rainfall. Also, urban water suppliers are still required to submit monthly water monitoring reports to the SWRCB.

Governor's 2021 Drought Declaration

Governor Gavin Newsom declared a drought state of emergency on April 21, 2021, and asked state agencies to partner with local water districts and utilities to make Californians aware of drought and encourage actions to reduce water usage by promoting the DWR's Save Our Water Campaign and other water conservation programs. The proclamation also included measures to be implemented by the DWR, SWRCB, the Department of Fish and Wildlife, and the Department of Food and Agriculture as well as coordinated state and local actions to address issues stemming from continued dry conditions.

The governor issued subsequent drought emergency proclamations on May 10, June 8, and October 19, 2021, and March 28, 2022. The May 10th proclamation included further measures to be implemented by DWR, SWRCB, the Department of Fish and Wildlife, and the Department of Food and Agriculture. The July 8th proclamation called on Californians to voluntarily reduce water use by 15 percent from their 2020 levels. The October 19th proclamation required local water suppliers to implement water shortage contingency plans that are responsive to local conditions and prepare for the possibility of a third dry year. The March 28th proclamation required that by May 25, 2022, the SWRCB must consider adopting emergency regulations

defining nonfunctional turf[2] and banning irrigation of nonfunctional turf in the commercial, industrial, and institutional sectors. The proclamation also required that by May 25, 2022, SWRCB must consider adopting emergency regulations to implement the shortage response actions specified in UWMPs for a water shortage level of up to 20 percent.

The SWRCB tracks and reports monthly on the state's progress toward achieving a 15 percent reduction in statewide urban water use compared to 2020 use.

State Water Resources 2022 Water Conservation Regulations

On January 4, 2022, the SWRCB adopted an emergency regulation. On January 18, 2022, the emergency regulation became effective and remains in effect for one year from the effective date unless the SWRCB acts to end, modify, or readopt it. The emergency regulation requirements include:

- Turning off decorative water fountains.
- Turning off/pausing irrigation systems when it rains and for two days after rain.
- Using an automatic shut-off nozzle on water hoses.
- Using a broom, not water, to clean sidewalks and driveways.
- Giving trees just what they need and avoid overwatering.

On May 24, 2022, the SWRCB adopted a second emergency regulation. The emergency regulations went into effect on June 10, 2022, and remain in effect for one year unless SWRCB modifies, readopts, or ends the regulations before then. The emergency regulation requirements include:

- Urban water suppliers must submit preliminary supply and demand assessments to the Department of Water Resources by June 1, 2022.
- Urban water suppliers must implement all conservation actions in their locally adopted plans meant to address at least a water shortage level of 10 to 20 percent (Level 2) by June 10, 2022.
- Owners and managers of commercial, industrial, and institutional properties must not use potable water for irrigating non-functional turf.

Water Conservation in Landscaping Act of 2006

The Water Conservation in Landscaping Act of 2006 (AB 1881) required the DWR to update the State Model Water Efficient Landscape Ordinance (MWELO) by 2009. The State's model ordinance was issued on October 8, 2009. Under AB 1881, cities and counties were required to adopt a State-updated model landscape water conservation ordinance by January 31, 2010, or to adopt a different ordinance that was at least as effective in

[2] Nonfunctional turf is turf that is ornamental and not used for human recreation purposes such as school fields, sports fields, and parks.

conserving water as the updated model ordinance. It also required reporting on the implementation and enforcement of local ordinances, with required reports due by December 31, 2015.

2015 Update of the State Model Water Efficient Landscape Ordinance (Executive Order B-29-15)

To improve water savings in the landscaping sector, in 2015 the DWR updated the State Model Water Efficient Landscape Ordinance in accordance with Executive Order B-29-15. The model ordinance promotes efficient landscapes in new developments and retrofitted landscapes. The executive order called for revising the model ordinance to increase water efficiency standards for new and retrofitted landscapes through more efficient irrigation systems, greywater usage, and on-site stormwater capture and by limiting the portion of landscapes that can be covered in turf.

New development projects that include landscaped areas of 500 square feet or more—including residential, commercial, industrial, and institutional projects that require a permit, plan check, or design review—are subject to the model ordinance. The previous thresholds ranged from 2,500 square feet to 5,000 square feet.

Regional

Ventura County Waterworks District Rules and Regulations

Parts 2 and 3 of VCWD's Rules and Regulations detail requirements associated with connection fees and water charges. VCWD water rates include all capital improvement charges the payment of which is a condition of precedent to the supply of water to any residence, building, or parcel of land which has not been previously supplied with water by VCWD. Additionally, before receiving water service for any residence or building or parcel of land which has not been supplied with water by the VCWD, all necessary local system improvements should be furnished and installed by the project applicant at the applicant's expense.

Part 4 of VCWD's Rules and Regulations details water conservation requirements including water saving devices, water waste prohibitions, and emergency restriction on water.

Part 6 regulates the operation and maintenance of the recycled water distribution system and mandates the use of recycled water for golf course irrigation, landscape irrigation, irrigation of nursery stock, recreational impoundment, construction water and other such legal uses in areas where recycled water service is available.

Ventura County Waterworks District No. 1 Urban Water Management Plan

The proposed project is within the existing service area of the VCWD No. 1. The VCWD is required to prepare a UWMP for its service areas pursuant to Water Code Sections 10610 through 10656 of the Urban Water Management Planning Act, effective January 1, 1984. The Urban Water Management Planning Act requires all urban water suppliers to prepare, adopt, and file a UWMP with the DWR every five years. The VCWD No.1 2020 UWMP outlines current water demands, sources, and supply reliability by forecasting water use based on climate, demographics, and land use changes.

The plan also details the Water Shortage Contingency Plan used in case of shortage emergencies. The contingency plan is framed around six standard shortage levels that correspond to progressive ranges of up to 10, 20, 30, 40, 50, and greater than 50 percent shortages. Each of the six shortage levels represents an increasing

gap between the VCWD No. 1's estimated core supplies and unconstrained demand. Shortage levels also apply to catastrophic interruption of water supplies, including, but not limited to, a regional power outage, an earthquake, and other emergency events. The contingency plan includes both voluntary and mandatory measures that are triggered for each shortage level.

Local

Moorpark Landscape Design Standards and Guidelines

The purpose of the Landscape Design Standards and Guidelines is to assist in the preparation of landscape plans while incorporating water conservation measures, design aesthetics, and landscape consistency throughout the City of Moorpark. The document was prepared as a guide for use by landscape architects and others involved with the development of projects. These standards and guidelines include water use and landscape plan submittal requirements as outlined in the updated model ordinance, as well as the City's minimum landscape standards established to create a sense of community character. The landscape plans must meet the basic criteria within these standards and guidelines.

Moorpark Municipal Code

Chapter 15.23, Water Efficient Landscape Ordinance: This chapter adopts by reference the most current model ordinance.

Chapter 15.10, Green Building Standards Code: This chapter adopts by reference the most current CALGreen Building Code. CALGreen applies to the planning, design, operation, construction, use, and occupancy of every newly constructed building or structure in California, unless otherwise indicated in the code.

Moorpark Drought Action Plan

The purpose of the Drought Action Plan is to enact procedures to assess, maintain, repair, and retrofit existing plumbing fixtures, pipes, and irrigation systems in all City buildings, parks, and facilities. The plan also includes measures to reduce irrigated City-owned landscaped areas and increase the use of recycled water in City parks and landscaped maintenance districts. The plan also encourages water conservation in the community by adopting procedures and programs to encourage conversion of landscaping to native and low water use landscaping and promoting community outreach.

5.19.2.2 EXISTING CONDITIONS

Water Infrastructure

Water Distribution System

Moorpark's existing potable water system is managed by VCSD No. 1, which provides potable water and sanitation services to a population of approximately 37,000. VCSD No. 1's boundaries encompass approximately 20,000 acres, including the City of Moorpark as well as contiguous, unincorporated areas to the north and west of the city. The VCSD No. 1's customer accounts include over 11,000 residential and 156 agricultural accounts. The water system includes 175 miles of water lines, 4 groundwater wells, 18 tanks, 10

booster pump stations, and 4 lift stations (see Figure 5.19-3, *Existing Water System Facilities*). Water supplies are procured from three sources: approximately 9 percent of water is reclaimed; 20 percent of water is extracted from local groundwater, which is managed by the Fox Canyon Groundwater Management Agency; and the remaining 71 percent is imported from the Calleguas Municipal Water District (CMWD).

Distribution pipelines range in diameter from 4 to 36 inches. The majority of the water pipes are 8-inch pipes, which make up about 48 percent of the network. VCWD No. 1 also maintains a network of recycled water infrastructure for outdoor common areas.

VCWD No. 1 Water System Master Plan

The 2008 VCWD No. 1 Water System Master Plan Update (WSMP) was developed to better understand water supplies and demands and create a hydraulic computer model to assess the capacity of the water infrastructure to meet projected demands through 2030. Two previous master plans were completed in 1981 and 1992. The methodology for the 2008 WSMP included an initial survey of the City's existing water supply, storage, and pumping facilities, which used records searches, field investigations, and staff interviews. Population characteristics were determined based on population growth and land use. Water use factors were then developed for pressure zones to determine required existing and maximum water system supply based on existing water usage patterns. Future conditions were determined using applicable land use criteria for the city and adjacent unincorporated areas in 10-year increments through 2030, and recommendations were made for each 10-year increment (2010, 2020, and 2030). The recommendations addressed water system deficiencies and were added to the City's CIP list for funding and construction (Fuscoe 2022). Of the eight improvement projects in the city limits identified in the 2008 WSMP and shown in Table 5.19-4, *Water System Master Plan*, two project have been fully executed.

Table 5.19-4 Water System Master Plan

Project Name	Description	Original Date of Completion	2020 Updates from County Waterworks District
1.5 MG Moorpark Yard Reservoir #1	This reservoir will address storage deficiencies found in Zone 757.	2010	This project was determined to be complete by District staff
1.5 MG Ridgemark Reservoir #1	This reservoir will provide needed storage capacity for Zone 944.	2010	No new updates, will be addressed in future CIP
1.0 MG Stockton Reservoir #1	This reservoir will provide needed storage capacity for Zone 994.	2010	No new updates, will be addressed in future CIP
New Pressure Regulating Station (1)	Increased development is anticipated for zone 757 and will require a new pressure-regulating station.	2010	This project was determined to be complete by District staff
Emergency Booster Station Piping	Interconnection with Zone 757, which is lower in elevation, is recommended to allow flow from Zone 920.	2010	Proposed for design and construction in FY 2025-2027
1.5 MG Ridgemark Reservoir #2	This reservoir will provide needed storage capacity for Zone 944.	2020	No new updates, will be addressed in future CIP
1.0 MG Stockton Reservoir #2	This reservoir will address storage deficiencies found in Zone 994.	2020	Proposed for construction in FY 2022-2024 per the current five-year CIP
1.5 MG Moorpark Yard Reservoir #2	This reservoir will address storage deficiencies found in Zone 757.	2030	Proposed for design and construction in FY 2025- 2027 per the current five-year CIP

Source: Fuscoe 2022.
Notes: MG = million gallons

5. Environmental Analysis
UTILITIES AND SERVICE SYSTEMS

There are several projects on the current CIP list for VCWD No.1 for FY 2022-2027 that were added since the 2008 WSMP, as shown in Table 5.19-5, *VCWD No.1 CIP Projects*. For an exhibit of all water system improvement projects in the city, see Figure 5.19-4, *Existing Water System Improvement Projects*.

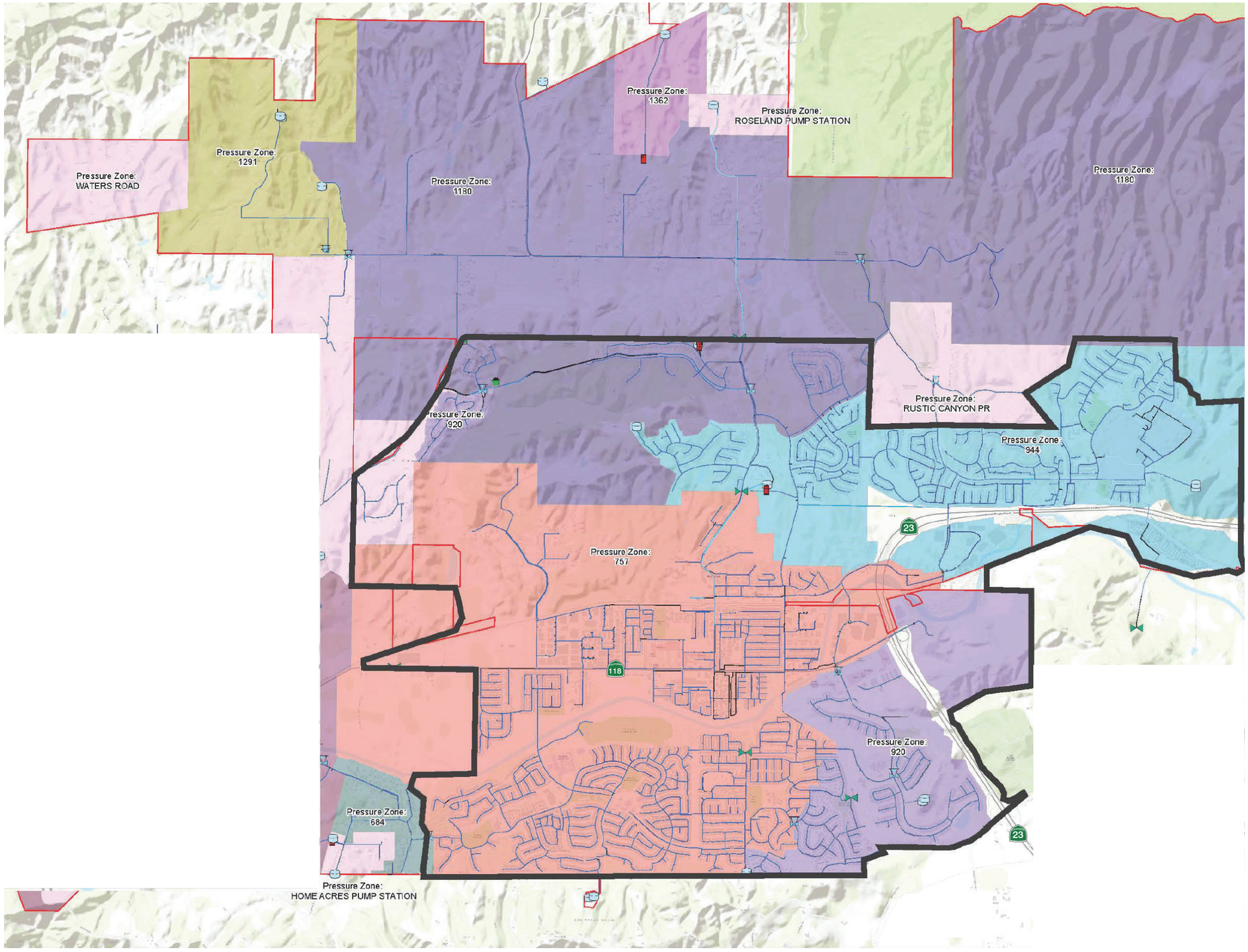
Table 5.19-5 VCWD No.1 CIP Projects

Project Name	Description	Project Cross-Listed in District 2008 WSMP	2020 Updates from County Waterworks District
Moorpark Desalter Design and Environmental Study	Studies on stormwater diversion and mitigation to finalize desalter location and scope	No	Proposed for design in FY 2022-2024
Moorpark Desalter Stormwater Recharge Project	This desalter will address water quality and supply deficiencies throughout the region	No	Proposed for design in FY 2022-2023 and construction in FY 2023- 2025
New 1.0 MG Stockton Reservoir #2	This reservoir will address storage deficiencies found in Zone 994.	Yes	Proposed for Construction in 2022-24
Replacement of water lines on Roberts, Esther, and Sherman Avenues (Walnut Acres Tract)	Installation of 8-inch water line to replace aging undersized lines	No	Proposed for design in FY 2024-2025 and construction in FY 2025- 2027
Grimes Reservoir and 757 Zone Interconnections	This reservoir will address storage deficiencies found in Zone 757	No	Proposed for Design in FY 2022-24 and construction in FY 2024-2025
1.5 MG Moorpark Yard Reservoir #2	This reservoir will address storage deficiencies found in Zone 757.	Yes	Proposed for design and construction in FY 2025-2027 per the current five-year CIP
Re-drill Well No. 97	Re-drilling and replacement of ageing wells	No	Proposed for design and construction in FY 2022-2023
Well No. 95 & 98 Water Treatment Facility	This water treatment facility will address water quality throughout the region	No	Proposed for design and construction in FY 2025-2027
Emergency Booster Station Piping	Interconnection with Zone 757, which is lower in elevation, is recommended to allow flow from Zone 920.	Yes	Proposed for design and construction in FY 2025-2027 per the current five-year CIP
10-inch Water Line North Los Angeles Ave. and Hitch Blvd. Intersection.	This 10-inch water line will provide needed storage capacity for Zone 757	Yes	Proposed for design and construction in FY 2025-2027
General Water System Improvements	These general water system improvements will address storage and efficiency needs throughout the District	Yes	Proposed for design and construction in FY 2022-2027
SCADA Improvements	Increased development anticipated for the district which will require SCADA improvements	Yes	Proposed for design and construction in FY 2022-2027
Reservoirs Repairs, Relining & Recoating	Removal of waste, repairs to paint defects, corrosion, bolts, nuts, and other hardware	Yes	Proposed for design and construction in FY 2023-2027

Source: Fuscoe 2022.
Notes: FY = Fiscal Year, LF = linear feet, MG = million gallons

Figure 5.19-3

Existing Water System Facilities



Facilities

- Reservoir
- Turn Out
- Booster Station
- Pressure Reducing Station
- Well

Water Mains

- Undefined Material
- AC
- PVC
- DIP
- CAS
- CML
- SP

- District Boundary
- City of Moorpark Boundary

MADE BY MOORPARK General Plan 2050

Draft Environmental Impact Report

0 0.25 0.5 1 Miles

Source: PlaceWorks, 2022

Date: 10/31/2022

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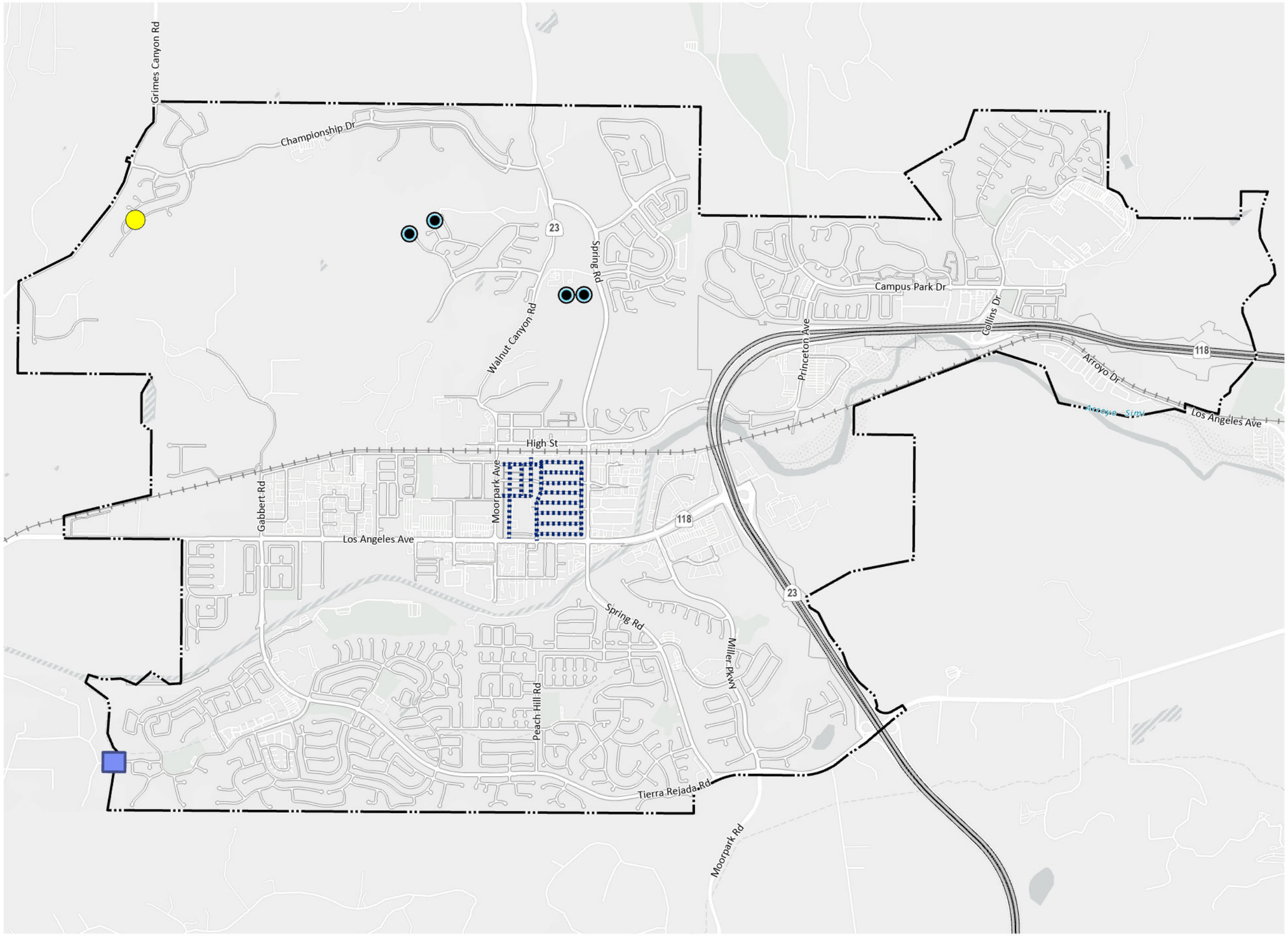
Figure 5.19-4

Existing Water System Improvement Projects



City Boundary
New Pipelines/Pipeline Replacement
Pressure Regulation Station for Zone 757
Reservoir/Hydropneumatic Tank Projects
Water Well Booster Station PRoject

MADE BY MOORPARK General Plan 2050

Draft Environmental Impact Report

0 1,000 2,000 4,000 FT

Source: PlaceWorks, 2022

Date: 11/1/2022

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VCWD No. 1 Water Supply and Demand

VCWD No. 1 Water Supply

VCWD No.1's water comes from three sources: imported water, groundwater, and reclaimed water. Imported water is the primary source of supply, bringing in 71 percent of all supply. The imported water comes from the Metropolitan Water District (MWD) of Southern California through the CMWD, a local wholesaler. The second largest supply (approximately 20 percent) comes from local groundwater production from VCWD-owned wells. Finally, reclaimed water brings in approximately 9 percent of all supply through the MWRF.

To help meet future demands, the VCWD is planning two water projects. The Stockton Reservoir project would replace an existing half-million-gallon storage reservoir on Stockton Road with a million-gallon storage reservoir, allowing VCWD to store additional water at this location. The Moorpark Desalter Project aims to lower the dependence on imported water by treating brackish groundwater to drinking water quality.

Over the next 20 years, supply is predicted to continue to meet the demands of all water users in the VCWD No.1's service area (including single and multifamily residential, commercial, industrial, institutional, agricultural, and others) (VCPW 2021).

Imported Water

Imported water is primarily State Water Project water from the Sacramento-San Joaquin River Delta in Northern California that has been treated at MWD's Joseph Jensen Filtration Plant. MWD water is provided to VCWD No.1 through CMWD. In Fiscal Year 2020, VCWD No.1's purchases from CMWD totaled 7,112 af.

MWD is a wholesale water agency that was formed in 1928 and is composed of 26 member water agencies. As a wholesaler, MWD has no retail customers, but serves customers through member agencies that account for approximately 19 million people in six Southern California counties. MWD treats sourced water from the Colorado River and the State Water Project (San Joaquin River Delta) as well as additional supplies from water transfers, exchanges, water banking, and other projects. In 1960, CMWD became a member agency of MWD.

VCWD No. 1 has a purchase agreement with CMWD with a water allocation amount of 10,722.5 afy. It is anticipated that supplies from MWD would exceed future water demands from its customer base during normal-year, single-dry year, and extended drought periods. This ensures the reliability of imported water to VCWD No.1 would meet projected demands into the future (VCPW 2021).

Groundwater

VCWD No. 1 pumps groundwater from the East Las Posas Subbasin via four active wells owned and operated by VCWD, with a total system capacity of approximately 2,260 gpm (3,645 afy). The groundwater is chlorinated at the well sites before being pumped into the potable water distribution system. In 2020, VCWD No. 1 supplied a total of 1,966 af from groundwater production.

The East Las Posas Subbasin is managed and protected by the Fox Canyon Groundwater Management Agency, an independent special district, separate from the County of Ventura and any city government, that is responsible for managing and protecting both confined and unconfined aquifers within its boundaries. The

groundwater is chlorinated at the well sites, and two wells are treated for high iron and manganese before being pumped into the potable water distribution system.

The Fox Canyon Groundwater Management Agency allocated the VCWD No.1 a maximum of 1,756 afy for groundwater production in 2016. In December 2020, an ordinance was adopted to establish an extraction allocation system for the Las Posas Valley Groundwater Basin. The ordinance allocated 2,195 afy for VCWD No. 1 to meet the requirements outlined in the Groundwater Sustainability Plan. This requirement took effect on January 1, 2021. Based on the ordinance, any unused extraction allocation can be carried over for use in a following water year, with only 50 percent of an extraction allocation available for carry over. All extractions during a water year more than the allocations established by the ordinance would be subject to extraction surcharges.

To reduce dependence on imported water, VCWD is in the planning phases of the Moorpark Desalter Project. This project includes construction of production water wells in the shallow aquifer of the South Las Posas Subbasin and extraction of the brackish groundwater, which is high in salts and dissolved solids. Once extracted, this groundwater would be filtered through a membrane treatment process and disinfected, resulting in treated water that will meet State drinking water quality standards. The treated water would then be delivered to VCWD No.1's water distribution system. The system is estimated to provide up to 5,000 afy of potable water. The brine waste from the treatment process would be discharged into the CMWD's Salinity Management Pipeline to be transported to the Pacific Ocean.

The Fox Canyon Groundwater Management Agency maintains that the Las Posas Basin is in overdraft compared to the native water supply to the basin. This has been mitigated in some areas by nonnative inflows from wastewater treatment plant discharges, urban runoff, and shallow groundwater dewatering discharges from upstream areas. Since 1992, the agency has incrementally reduced groundwater allocations by 25 percent (VCPW 2021).

Recycled Water

Since 2003, the VCWD No.1 has been utilizing the MWRF to generate reclaimed water for additional supply. Approximately 1.5 mgd of effluent is treated to tertiary levels, to meet California Code of Regulations Title 22 requirements, and delivered for irrigation uses. The plant produced 966 af of recycled water in 2020 and sold approximately 941 af. The plant currently has a secondary treatment capacity of 5.0 mgd (5,600 afy) and a tertiary capacity of 3.0 mgd (3,360 afy) but is only permitted up to 1.5 mgd (1,680 afy) of tertiary effluent. It is projected that recycled water use will increase to 2,200 afy by 2040.

VCWD supplies recycled water to 13 users throughout the service area for landscape irrigation at golf courses, agricultural irrigation, and grading and dust control uses. The plant is also required to annually discharge a minimum 0.76 mgd (850 afy) of its treated effluent to percolation basins for groundwater recharge (VCPW 2021).

VCWD No. 1 Water Demand

Per SBx7-7, VCWD No. 1 must determine baseline water use during the baseline period and water use target for 2020 to meet the state's water reduction goal. The VCWD No. 1's 2020 target was 194 gpcd. The 2020 UWMP reported that VCWD No. 1 had met the 2020 water use target with an actual use in 2020 of 173 gpcd.

A summary of the projected demands of water for VCWD No. 1 from their 2020 UWMP is shown in Table 5.19-6, *Projected Water Demand (af)*. VCWD No. 1 projected that water demand for normal years would increase from 10,198 af in 2020 to 12,662 af in 2045, an increase of 1,560 af.

Table 5.19-6 Projected Water Demand (af)

	2020	2025	2030	2035	2040	2045
Potable Water	9,257	9,502	9,728	9,982	10,210	10,462
Recycled Water	941	1,600	1,800	2,000	2,200	2,200
Total Supply	**10,198**	**11,102**	**11,528**	**11,982**	**12,410**	**12,662**

Source: VCPW 2021.
Notes: af = acre-feet

VCWD No. 1 Water Supply Reliability

Overall, VCWD No. 1 has documented that it is 100 percent reliable for a normal year, a single-dry year, and multiple-dry year events from 2025 through 2045. Tables 5.19-7 through 5.19-9 show VCWD No. 1's water demand and supply through these conditions. Furthermore, the estimated allocation of water from MWD during a dry year is sufficient to meet the CMWD's projected dry year imported water demands from 2025 through 2045. Sufficient supplies are also projected to be available for the years 2025 through 2045 for single-dry and multiple-dry year conditions (VCPW 2021).

Table 5.19-7 Projected Normal Year Supply and Demand (af)

	2025	2030	2035	2040	2045
Supply Total	11,102	11,528	11,982	12,410	12,662
Demand Total	11,102	11,528	11,982	12,410	12,662
Difference	**0**	**0**	**0**	**0**	**0**

Source: VCPW 2021.
Notes: af = acre-feet

Table 5.19-8 Projected Single Dry Year Supply and Demand (af)

	2025	2030	2035	2040	2045
Supply Total	13,367	12,315	12,818	13,314	13,643
Demand Total	10,649	11,175	11,415	11,632	11,870
Difference	**2,718**	**1,140**	**1,403**	**1,682**	**1,773**

Source: VCPW 2021.
Notes: af = acre-feet

Table 5.19-9 Projected Multiple Dry-Year Event Supply and Demand (af)

		2025	2030	2035	2040	2045
First Year Supply	Demand Total	13,345	12,308	12,821	13,302	13,620
	Supply Total	11,022	11,264	11,501	11,734	11,994
	Difference	**2,323**	**1,044**	**1,320**	**1,568**	**1,626**
Second Year Supply	Supply Total	13,155	12,242	12,751	13,227	13,541
	Demand Total	11,687	11,492	11,749	12,003	12,288
	Difference	**1,468**	**750**	**1,002**	**1,224**	**1,253**
Third Year Supply	Supply Total	13,170	12,247	12,740	13,230	13,545
	Demand Total	11,635	11,474	11,733	11,984	12,268
	Difference	**1,535**	**773**	**1,008**	**1,245**	**1,276**
Fourth Year Supply	Supply Total	13,711	12,434	12,960	13,477	13,780
	Demand Total	9,999	10,916	11,120	11,315	11,540
	Difference	**3,712**	**1,518**	**1,841**	**2,131**	**2,240**
Fifth Year Supply	Supply Total	13,535	12,373	12,891	13,377	13,701
	Demand Total	10,459	11,073	11,292	11,502	11,742
	Difference	**3,076**	**1,300**	**1,598**	**1,875**	**1,959**

Source: VCPW 2021.
Notes: af = acre-feet

Moorpark Existing Water Demand

The existing water demand for single-family residential, multifamily residential, and nonresidential square footage in the city is estimated at 6,869 afy (see Appendix H). The 2020 UWMP reported an actual demand of 6,862 afy for theses uses, not including agricultural irrigation, losses, or other potable uses. Thus, actual demand from the 2020 UWMP aligns with the calculated demand of 6,869 afy.

On May 10, 2022, at the request of the Ventura County Public Works Agency Water and Sanitation Department, the Ventura County Board of Supervisors adopted a resolution declaring a Level 3 Water Shortage for all VCWD areas (Moorpark, Somis, Lake Sherwood, and Bell Canyon).

5.19.2.3 THRESHOLDS OF SIGNIFICANCE

According to Appendix G of the CEQA Guidelines, a project would normally have a significant effect on the environment if the project:

U-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.

U-2 Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years.

5.19.2.4 ENVIRONMENTAL IMPACTS

Methodology

To estimate determine whether development pursuant to the Moorpark General Plan 2050 would exceed the water demand projections of the VCWD No. 1 2020 UWMP, existing and future water demand were calculated based on the water demand factors in the VCWD No. 1 2020 UWMP and the Water Supply Assessment for the Hitch Ranch Specific Plan approved by the VCWD No. 1. Demand factors for the Moorpark General Plan 2050 consider future conservation as well as advances in water efficiency for new buildings. To calculate the projected increase in water demand associated new residential buildings, updated water demand factors from the Hitch Ranch 2020 WSA were applied to the proposed increase in single-family residential and multifamily residential land uses. For nonresidential square footage, the demand factor from the UWMP was reduced by 20 percent to account for efficiencies in new developments per green building code requirements. The calculations assume that potable water would be used for both indoor and outdoor water use. Additionally, the 2020 UWMP included four specific plans[3] in its projections that are also included in the Moorpark General Plan 2050 projections. The projected water demand for these specific plans is 1,277 afy. For details on the water demand calculations for Moorpark, see Appendix H.

For nonpotable water, VCWD anticipates the need to expand the existing wastewater treatment plant's tertiary treatment capacity to 1.96 mgd (2,200 afy) by 2040 to accommodate the need from a growing customer base. Existing recycled water distribution in 2021 totaled 1,018 afy, and recycled water availability at buildout of the Moorpark General Plan 2050 would be 1,182 afy, which would be available to offset outdoor potable water use within areas of new development (see Appendix H).

Impact Analysis

The following impact analysis addresses thresholds of significance for which the Initial Study disclosed potentially significant impacts. The applicable thresholds are identified in brackets after the impact statement.

Impact 5.19-3: Development pursuant to the Moorpark General Plan 2050 could require construction of new or expanded water facilities (potable and nonpotable); however, their construction or relocation would not cause significant environmental effects. [Threshold U-1]

The city's water infrastructure includes both potable and nonpotable (recycled) water systems, which are managed by VCWD No. 1. Development associated with buildout of the Moorpark General Plan 2050 could require new or expanded water infrastructure. VCWD No. 1 accounts for increases in potable water flow and associated potable infrastructure in Moorpark as part of the Water System Master Plan. Additionally, VCWD No. 1 currently maintains a network of nonpotable water infrastructure for outdoor common areas. As new projects are development, the nonpotable water lines are extended to accommodate recycled water use in outdoor common areas. Developers coordinate with VCWD No. 1 on the installation of recycled water

[3] Carlsberg, Hitch Ranch, Moorpark Highlands, and the Downtown specific plans were all included within the UWMP projections for water demands, as confirmed by the District on September 22, 2022, via email.

infrastructure. Recommended improvements for potable and nonpotable lines are then constructed based on funding allocated in the CIP or through funding agreements with developers and VCWD No. 1.

The water system improvements identified in the VCWD No.1's 2022-2027 CIP typically include reservoir improvements, water infrastructure relining, and other as-needed improvements. None of the improvements overlie areas in the city where the majority of the land use changes from existing conditions would occur. Moreover, new construction in the city would be required to install potable and nonpotable water infrastructure.

Additionally, VCWD has a formal process to ensure that the overall water system, including infrastructure, fire flow requirements, and water supply availability, is managed efficiently and functions properly. VCWD has an established process to track the condition of water infrastructure through master planning efforts, established CIP projects, and review of required project documentation. If proposed projects require construction of potable or nonpotable water infrastructure, then new development would be required to construct the required improvements and/or enter into a funding agreement with the VCWD No. 1 to install the proposed improvements. Additionally, the City schedules a development review committee meeting for proposed projects going through the entitlement process. The meeting includes all reviewing and permitting departments, including VCWD, for preliminary comments. As a new development project progresses, VCWD would ask for water hydraulic reports and improvement plans for the plan check. Parts 2 and 3 of VCWD's Rules and Regulations also detail requirements associated with connection fees and water charges.

Policies LU-1.4, LU-1.5, and LU-17.8 of the proposed Land Use Element and Policies CI0-10.1, CI-11.1, CI-11.2, and CI-11.3 of the proposed Circulation Element promote the coordinated timing of future development and redevelopment with existing and planned infrastructure to ensure public facilities would not be adversely impacted. These policies also encourage investment in infrastructure and capital improvements to facilitate redevelopment, infill development, and new development that is consistent with the proposed Land Use Plan. Therefore, impacts associated with buildout of the Moorpark General Plan 2050 would be less than significant.

For new developments that connect to existing VCWD water mains, construction impacts would primarily be confined to trenching for miscellaneous utility lines and connections to public infrastructure. Installation of water infrastructure would be limited to on-site water distribution and minor off-site work associated with connections to the public main. No upgrades to the public main are anticipated. Work that may affect services to the existing water lines would be coordinated with the City and VCWD. Furthermore, a construction management plan, which would ensure safe pedestrian access as well as emergency vehicle access and safe vehicle travel in general, would be implemented to reduce any temporary pedestrian and traffic impacts occurring as a result of construction activities. Moreover, when considering impacts resulting from the installation of any required water infrastructure, all impacts are of a relatively short-term duration and would cease to occur once the installation is complete. Therefore, impacts associated with construction activities would be less than significant.

Level of Significance Before Mitigation: Less than significant.

Impact 5.19-4: Available water supplies are sufficient to serve development pursuant to the Moorpark General Plan 2050 and reasonably foreseeable future development during normal, dry, and multiple dry years. [Threshold U-2]

Buildout of the Moorpark General Plan 2050 would result in an increase in water demand within the City, which is served by the VCWD No. 1. As shown in Table 5.19-10, *Moorpark General Plan 2050 Water Demand*, the Moorpark General Plan 2050 would result in an increase in water demand of 2,069 afy from existing conditions for a total water demand of 8,938 afy.

Table 5.19-10 Moorpark General Plan 2050 Water Demand

Proposed Land Use	Increase in Number Dwelling Units	Increase in Non-Residential Square Footage	Persons per Dwelling Unit	Water Demand Factor[1]	Increase in Water Demand (gpd)	Increase Water Demand (afy)[2]
SFR	1,459	–	3.23	135 gpcd	636,197	713
MFR	4,030	–	3.23	60 gpcd	781,014	875
Non-Residential	–	4,783,912	–	0.09 gpd/SF	430,552	482
					Net Increase	**2,069**
					Existing	**6,869**
					Total Water Demand (Potable + Nonpotable)	**8,938**
					Existing Specific Plans[3]	-1,277
					New Recycled Water Planned for 2045	-1,182
					Total Potable Water with Adjustments	**6,479**

Source: Fuscoe 2022, DOF 2021.
Notes: gpd = gallons per day; SFR = single-family residential; MFR = multifamily residential; afy = acre-feet per year
1 For residential dwelling units and 20 percent reduction on UWMP nonresidential demand factor.
2 The UWMP includes growth associated with the existing Carlsberg, Hitch Ranch, Moorpark Highlands, and Downtown Specific Plans.

The VCWD No. 1's 2020 UWMP forecasts that water demands for single-family residential, multifamily residential, and nonresidential uses would increase to 7,755 afy by 2045. Table 5.19-10 shows that potable water demand for Moorpark would be offset by an increase in nonpotable water in areas of new development. Recycled water capacity is increasing by approximately 1,182 afy. Therefore, total water demands for the Moorpark General Plan 2050 are estimated to be 6,479 afy, which is within the 2045 projected demand of 7,755 afy for single-family residential, multifamily residential, and nonresidential uses accounted for in the 2020 UWMP.

VCWD No. 1 has documented that its supplies are 100 percent reliable and sufficient for a normal year, single-dry year, and multiple-dry year events from 2025 through 2045. Furthermore, the estimated allocation of water from MWD during a dry year is sufficient to meet the CMWD's projected dry-year imported water demands from 2025 through 2045.

In addition to the regional water supply planning under the UWMP, the City and VCWD must comply with SB 610 and SB 221, which improve the link between information on water supply availability and certain land use decisions by cities and counties. VCWD No.1 reviews water supply assessments under SB 610 and SB 221 to confirm water availability in support of certain developments. Development pursuant to the Moorpark General Plan 2050 would also need to comply with the requirements of Parts 4 and 6 of the VCWD's Rules

and Regulations, which detail water conservation requirements and the use of recycled water. Development would also comply with the Moorpark Landscape Design Standards and Guidelines, Chapter 15.23 of the municipal code, and the requirements of CALGreen and the California Plumbing Code.

Policies LU-8.1, LU-8.2, and LU-8.5 of the proposed Land Use Element; Policies CI-10.1, CI-11.1, CI-11.2, and CI-11.3 of the proposed Circulation Element; Policy OSPR-1.12 of the proposed Open Space, Parks and Recreation Element; and Policies COS-5.1, COS-5.2, COS-5.4, and COS-5.5 of the proposed Conservation Element promote the efficient use of water, water conservation practices, water reuse, the integrated use of water resources, and regular monitoring of water demand and supply. Policy SE-5.6 of the proposed Safety Element encourages the City to work with regional water providers to implement water conservation measures and ensure sustainable water supplies to prepare for more frequent and severe drought events.

Therefore, VCWD No. 1 would have sufficient water supply to accommodate growth associated with buildout of the Moorpark General Plan 2050 and impacts on water supply would be less than significant.

Level of Significance Before Mitigation: Less than significant.

5.19.2.5 RELEVANT GENERAL PLAN POLICIES

Land Use Element

- **Policy LU-1.4 Public services to support growth.** Coordinate new development and redevelopment of existing properties to ensure that the existing and planned capacity of public facilities and services shall not be adversely impacted.

- **Policy LU-1.5 Development timing.** Manage new development and redevelopment to ensure that it is orderly with respect to location, timing, and density/intensity; concurrent with the provision of local public services and facilities; and compatible with the overall community character.

- **Policy LU-8.1 Model of environmental sustainability.** Establish Moorpark as a leader of land use development practices that contribute to the sustainability and stewardship of environmental resources including air quality protection, energy and water efficiency, natural resource conservation, greenhouse gas reduction, and climate change resiliency.

- **Policy LU-8.2 Reduction of energy and water use.** Encourage developers to exceed standards for building design and construction specified by the California Green Building Standards Code, with goals of achieving net zero energy and water use.

- **Policy LU-8.5 Low-impact landscapes.** Require new development projects to use low impact landscaping techniques which include drought-tolerant plant species, reduction of turf area, irrigation designed to meet plant needs, and grouping plants according to their watering needs. Help facilitate the transition of landscaping within existing residential communities to low impact landscaping types.

- **Policy LU-17.8 Equitable access to infrastructure.** Support equitable access to a full complement of critical infrastructure and utilities for all residents and business.

Circulation Element

- **Policy LU-8.5 Harvest and reuse systems.** Incentivize new development/redevelopment projects to implement stormwater harvest and reuse systems in addition to adopted standards.
- **Policy LU-10.1 Recycled Water.** Expand the capacity of recycled water resources and distribution infrastructure..
- **Policy LU-11.1 Coordinate with partners.** Continue to coordinate with District on effective management of water infrastructure systems.
- **Policy LU-11.2 Monitor supply and demand.** Track local and regional water supplies with the District to ensure adequate water supplies exist to support future development.
- **Policy LU-11.3 OneWater approach.** Implement OneWater approach where potable water, grey water, recycled water, and stormwater are all viewed as integral components to integrated water management alongside natural flows and watersheds within the City.
- **Policy LU-11.4 On-site greywater and stormwater standards.** Adopt new statewide standards for on-site greywater and stormwater systems, or develop City standards to streamline the permitting of these systems by following the Building and Safety Division, Building Code, and other applicable regulatory agencies and associated guidance documents.

Economic Development Element

- **Policy LU-4.3 Infrastructure and capital improvements.** Invest in infrastructure and capital improvements that facilitate redevelopment, infill development, and new development that is consistent with the Land Use Plan, as funding is available.
- **Policy LU-5.2 Downtown infrastructure.** Ensure that sufficient infrastructure is provided to support the types of uses planned for the Downtown area, including an actionable plan for such upgrades.

Open Space, Parks and Recreation Element

- **Policy OSPR-1.12 Sustainability features.** Require that new parks are designed, and existing parks are retrofitted over time, to incorporate sustainable development and landscape practices that reduce water and energy consumption.

Conservation Element

- **Policy COS-5.1 Drought-tolerant landscaping.** Provide education and grant programs to encourage replacement of lawns and other water-intensive landscaping with drought-tolerant landscaping, especially landscaping incorporating native species and xeriscaping.

- **Policy COS-5.2 Water reuse.** Encourage property owners to install rainwater catchment and greywater systems in new developments or major retrofits.
- **Policy COS-5.4 Low-cost water efficiency.** Continue to work with water providers to educate community members about low-cost water efficiency improvements in homes and businesses.
- **Policy COS-5.5 Net zero water use.** Encourage developers to design new structures and property landscapes to achieve net zero water use, to the extent feasible.

Safety Element

- **Policy SE-5.6 Water conservation.** Prepare for more frequent and severe drought events by working with regional water providers to implement water conservation measures and ensure sustainable water supplies.

5.19.2.6 LEVEL OF SIGNIFICANCE BEFORE MITIGATION

Upon implementation of regulatory requirements and standard conditions of approval, the following impacts would be less than significant: 5.19-2 and 5.19-3.

5.19.2.7 MITIGATION MEASURES

No mitigation measures required.

5.19.2.8 LEVEL OF SIGNIFICANCE AFTER MITIGATION

Impacts 5.19-2 and 5.19-3 are less than significant.

5.19.3 Storm Drainage

5.19.3.1 ENVIRONMENTAL SETTING

Regulatory Background

State

Porter-Cologne Water Quality Control Act

Under the Porter-Cologne Water Quality Control Act (Water Code Sections 13000 et seq.), which was passed in California in 1969 and amended in 2013, the SWRCB has authority over State water rights and water quality policy. This act divided the state into nine regional basins, each under the jurisdiction of a Regional Water Quality Control Board (RWQCB) to oversee water quality on a day-to-day basis at the local and regional level. RWQCBs engage in a number of water quality functions in their respective regions. RWQCBs regulate all pollutant or nuisance discharges that may affect either surface water or groundwater. Moorpark is overseen by the Los Angeles RWQCB.

Regional

Los Angeles RWQCB (MS4) Permit for the Coastal Watershed of Los Angeles and Ventura Counties

On July 23, 2021, the Los Angeles RWQCB adopted a Regional Phase I Municipal Separate Stormwater Sewer System (MS4) Permit for discharges within the coastal watersheds of Los Angeles and Ventura counties (Order No. R4-2021-0105, NPDES No. CAS004004).

The Los Angeles County Flood Control District, County of Los Angeles, 85 incorporated cities within the coastal watersheds of Los Angeles County, Ventura County Watershed Protection District (VCWPD), County of Ventura, and 10 incorporated cities within Ventura County, including Moorpark, are subject to waste discharge requirements for their MS4 discharges originating from within their jurisdictional, as set forth in the permit.

Ventura County Technical Guidance Manual for Stormwater Quality Control Measures

The Technical Guidance Manual for Stormwater Quality Measures provides guidance for the implementation of stormwater management control measures in new development and redevelopment projects in the County of Ventura. The guidelines are intended to improve water quality and mitigate potential water quality impacts and have been developed to meet the requirements of the MS4 permit. The guidance manual does not expand or circumvent these requirements; rather, it provides guidance on how to meet them.

Ventura County Watershed Protection District Design Hydrology Manual

The intent of the VCWPD's Hydrology Manual is to present guidelines and sufficient input data for computing design hydrology, including peak flow rates, in Ventura County. Design procedures are intended for use by all agencies and engineering consultants engaged in the design of flood control works and development projects throughout the county. The manual also includes development mitigation criteria to minimize the impacts of development on the existing drainage system.

Local

Moorpark Master Plan of Drainage

The City of Moorpark's Master Plan of Drainage (MPD) was first prepared in 1995. The purpose of the MPD is to analyze the capacity of the storm drain facilities in the city and identify any deficiencies or capital improvements needed. The City used the 50-year design storm to quantify peak runoff to analyze existing storm drain facilities and size potential improvements. Regional flood control facilities, such as detention basins, are sized for the 100-year storm event. This sizing criteria, along with flood capacities within the street, serves to provide 100-year protection of structures throughout Moorpark. This remains in line with the FEMA Flood Insurance program because all new developments and redevelopments must achieve 100-year storm protection.

City of Moorpark Municipal Code

Chapter 8.52, Stormwater Quality Management, of the City municipal code includes prohibitions on illicit connections and illicit discharges. The chapter also includes the requirement that all development within the city be undertaken in accordance with the requirements established by an applicable NPDES permit related to

the reduction or elimination of pollutants in stormwater. Furthermore, the chapter requires the preparation of a stormwater pollution prevention plan in accordance with the state general permit and city requirements. Prior to the issuance by the city of any discretionary land use approval or permit for any development, the property owner shall submit to and obtain the approval of the director for a stormwater pollution prevention plan.

5.19.3.2 EXISTING CONDITIONS

Storm Drain System

Storm drain main lines are primarily maintained by the City or private property owners, and the larger main drainages are maintained by VCWPD. Portions of the city drain to watercourses that are under the jurisdiction of VCWPD. Storm drainpipe diameters range from 4 inches to 114 inches. The storm drain system in the city consists of 10 main storm drain facilities:

- **Arroyo Simi.** Arroyo Simi is the largest watercourse in the city and flows southwesterly through the middle portion of the city. Arroyo Simi becomes Arroyo Las Posas immediately west of the city's border. Approximately 5 miles of Arroyo Simi runs through the city. There is also a detention basin near Spring Road (VCWPD 2005). The Arroyo Simi and detention basin cannot detain the 100-year flood, and some urban areas in the city are in a FEMA Special Flood Hazard Area.

- **Castro-Williams Drain.** Castro-Williams Drain flows southerly to Arroyo Simi through the northeastern portion of the city. There is a debris basin constructed in the 1950s upstream of developed areas, near its confluence with Arroyo Simi near Los Angeles Avenue and Spring Street (VCWPD 2005).

- **Gabbert Canyon.** Gabbert Canyon drains southwesterly to Arroyo Simi and flows through the northwestern portion of the city. This facility receives flow from the northern part of the city and from Walnut Canyon Channel before its confluence with Arroyo Simi. There is a debris basin near Gabbert Road and Aspen Hills Road. Gabbert Canyon upstream of the debris basin is under the jurisdiction of VCWPD.

- **Happy Camp Canyon.** Happy Camp Canyon is a large VCWPD-maintained wash in the northeastern portion of the city. Flows drain southwesterly into Arroyo Simi.

- **Moorpark Storm Drain No 1.** Moorpark Storm Drain No 1 is in the central portion of the city and drains southerly to Walnut Canyon. This storm drain line crosses Princeton Avenue before discharging into Walnut Canyon near Princeton Avenue and Hedyland Court.

- **Moorpark Storm Drain No 2.** Moorpark Storm Drain No 2 is in the southwestern portion of the city and drains southerly to Arroyo Simi. This storm drain line crosses West Los Angeles Avenue before discharging into Arroyo Simi directly south of the intersection between Shasta Avenue and West Los Angeles Avenue.

- **No 2 Canyon.** No 2 Canyon drains southwesterly into Arroyo Simi and is in the northeastern-most section of the city. Flows from No 2 Canyon converge with Arroyo Simi south of Moorpark College. There is a debris basin east of Moorpark College.

- **Peach Hill Wash.** Peach Hill Wash is a trapezoidal channel in the southwestern portion of the city and drains generally to the west before connecting with Arroyo Simi to the north. There is a retention basin adjacent to Mountain Trail Street in the Mount Meadows development.

- **Strathearn Canyon.** Strathearn Canyon is in the northeastern portion of the city. It consists primarily of a concrete trapezoidal channel, and drains southeast into Arroyo Simi southwest of Moorpark College. North of Middle Ranch Road, Strathearn Canyon is a soft-bottom wash under VCWPD jurisdiction.

- **Walnut Canyon.** Walnut Canyon is in the northwest portion of the City and is tributary to Gabbert Canyon. Flows drains southerly and converge just west of the intersection of West High Street and Moorpark Avenue. The portion of the facility north of Waterworks Road is under the jurisdiction of the VCWPD. Basin 0 is located just north of Meridian Hills Road.

Other facilities include Strathearn Canyon East Fork, Campus Road Canyon, Big Mountain Oil Field Canyon, North Basin, and the Home Acres Drain. The City maintains a master plan of drainage to ensure the storm drain facilities are functioning effectively and protective of property and people. For an exhibit of the existing storm drain network within the City, see Figure 5.10.3, *Existing Storm Drain System*, in Section 5.10, *Hydrology and Water Quality*.

Existing Stormwater Drain System Capacity Assessment

The City of Moorpark's 1995 MPD analyzed the capacity of its storm drain facilities and identified any deficiencies or needed capital improvements. The City used the 50-year design storm to quantify peak runoff to analyze existing storm drain facilities and size potential improvements. Regional flood control facilities, such as detention basins, are sized for the 100-year storm event. This sizing criterion, along with flood capacities in the street, serve to provide 100-year protection of structures throughout the city. This is in line with the FEMA Flood Insurance program because all new developments and redevelopments must achieve 100-year storm protection. Land Use from the 1992 City General Plan was considered in computing imperviousness calculations as well as geographical features and soil classifications that were used to determine rate of runoff. Flow rates were calculated at select points of concentration and were used to evaluate existing systems as well as to plan for needed additional facilities in those drainage areas.

According to the 1995 MPD, there were approximately 13 proposed improvements identified in Moorpark. These proposed facilities were sized according to deficiencies found in older infrastructure. Locations for all proposed drainage facilities were mapped in the 1995 MPD. These improvements are summarized in Table 5.10-2, *Drainage Master Plan Proposed Project List*. The table also includes updates from the City's Public Works Department on the status of the improvement projects.

Since the 1995 MPD, improvements have been made to the storm drain system, and ongoing monitoring occurs through the City Public Works Department. Out of the 13 projects listed in the 1995 MPD, 5 have been completed. Another 2 projects are either in design, in construction, or have had funding approved. The remaining 6 projects have not yet been executed or approved. In addition, several projects are on the current CIP list for the city, some of which are cross-listed in the 1995 MPD. The projects identified in the Seven Year

Capital Improvement Program Fiscal Year 2015/2016 to Fiscal Year 2021/2022, shown in Table 5.10-3, include City-funded projects as well as major projects that are likely to be constructed by land developers.

For an exhibit of future projects proposed in the city for the storm drain network, see Figure 5.10-4, *Existing Storm Drain Recommended Improvements*.

5.19.3.3 THRESHOLDS OF SIGNIFICANCE

According to Appendix G of the CEQA Guidelines, a project would normally have a significant effect on the environment if the project:

U-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.

5.19.3.4 ENVIRONMENTAL IMPACTS

The following impact analysis addresses thresholds of significance for which the Initial Study disclosed potentially significant impacts. The applicable thresholds are identified in brackets after the impact statement.

Impact 5.19-5: Development pursuant to the Moorpark General Plan 2050 could require or result in the relocation or construction of new or expanded storm drainage facilities; however, their construction or relocation would not cause significant environmental effects. [Threshold U-1]

Development associated with the Moorpark General Plan 2050 would result in an increase in impervious surface that could increase stormwater flow to drainage channels maintained by the VCWD No. 1. However, new development would be required to install storm drain infrastructure so as not to exceed existing stormwater flow rates or volume.

As described in Impact 5.10-3, in Section 5.10, *Hydrology and Water Quality*, there are no downstream storm drain improvement projects that would be impacted by the development associated with buildout of the Moorpark General Plan 2050. However, if a deficiency in the capacity of the drainage systems downstream of vacant sites is identified in the future, the City and/or County would require improvements for future developments to achieve the standards identified in the Ventura County Hydrology Manual. The City has policies to require a developer to enter a cost-share mechanism to improve the storm drainpipe or require on-site detention for the project. The City also has a process for identifying and prioritizing drainage improvements through master planning efforts, CIP projects, and project-by-project specific requirements.

As per the City's municipal code, prior to the issuance of a grading permit or final map approval, applicants must identify any necessary storm drain improvements and temporary and permanent best management practices for the control of nonpoint water discharges, to ensure flood protection as well as protection of water quality. In addition, drainage improvements must be designed so that after-development drainage to adjacent parcels would not be increased above pre-development drainage quantities for any storm event between and including the 10 year and 100-year storms. All drainage measures necessary to mitigate stormwater flows must

be provided to the satisfaction of the City Engineer and Public Works Director. Applicants for development projects are required to make on-site and downstream improvements, required by the City, to support the proposed development. Peak flows would also be decreased overall due to the implementation of landscaping requirements as well as LID features associated with water quality regulations as described in Impact 5.10-1.

Furthermore, Policies LU-1.4, and LU-1.7.8 of the proposed Land Use Element and Policies CI-8.1 through CI-8.3 of the proposed Circulation Element require expanding and maintaining storm drain facilities to accommodate the needs of existing and planned development, managing the City storm drain infrastructure to reduce flooding, and coordinating with the VCWPD on flood control management and CIP projects to minimize impacts to City drainage features and establish fair and practical cost-sharing mechanisms. Therefore, impacts due to development pursuant to the Moorpark General Plan 2050 would be less than significant.

Level of Significance Before Mitigation: Less than significant.

5.19.3.5 RELEVANT GENERAL PLAN POLICIES

Land Use Element

- **Policy LU-1.4 Public services to support growth.** Coordinate new development and redevelopment of existing properties to ensure that the existing and planned capacity of public facilities and services shall not be adversely impacted.

- **Policy LU-1.5 Development timing.** Manage new development and redevelopment to ensure that it is orderly with respect to location, timing, and density/intensity; concurrent with the provision of local public services and facilities; and compatible with the overall community character.

- **Policy LU-8.5 Low-impact landscapes.** Require new development projects to use low impact landscaping techniques which include drought-tolerant plant species, reduction of turf area, irrigation designed to meet plant needs, and grouping plants according to their watering needs. Help facilitate the transition of landscaping within existing residential communities to low impact landscaping types.

- **Policy LU-17.8 Equitable access to infrastructure.** Support equitable access to a full complement of critical infrastructure and utilities for all residents and business.

Circulation Element

- **Policy CI-8.1 Infrastructure maintenance.** Manage City storm drain infrastructure in an effective manner to reduce flooding and protect downstream receiving waters.

- **Policy CI-8.2 Roles and responsibilities.** Develop clear mechanisms and documentation of the roles and responsibilities of City departments, Community Facilities Districts (CFD), and private property owners on required inspection and maintenance practices for drainage and water quality facilities.

- **Policy CI-8.3 Establish fair cost sharing mechanisms for drainage improvements.** Manage flood control management and CIP projects to minimize impacts to City drainage features and establish fair and practical cost sharing mechanisms.
- **Policy CI-8.4 Green streets and BMP.** Consider additional development/redevelopment requirements for City right-of-way Best Management Practice (BMP) improvements and promote green streets approaches.
- **Policy CI-8.5 Harvest and reuse systems.** Incentivize new development/redevelopment projects to implement stormwater harvest and reuse systems in addition to adopted standards.
- **Policy CI-8.6 Funding mechanisms for smarter watershed management.** Promote regional multi-benefit stormwater projects, consistent with regional watershed management programs, and determine feasibility of implementing stormwater credit program/in lieu fees for new development/redevelopment projects.
- **Policy CI-9.1 Management database and new technology methods.** Implement smart strategies to track and maintain all stormwater assets to ultimately improve watershed health.
- **Policy CI-11.3 OneWater approach.** Implement OneWater approach where potable water, grey water, recycled water, and stormwater are all viewed as integral components to integrated water management alongside natural flows and watersheds within the City.
- **Policy CI-11.4 On-site greywater and stormwater standards.** Adopt new statewide standards for on-site greywater and stormwater systems, or develop City standards to streamline the permitting of these systems by following the Building and Safety Division, Building Code, and other applicable regulatory agencies and associated guidance documents.

Economic Development Element

- **Policy ED-4.3 Infrastructure and capital improvements.** Invest in infrastructure and capital improvements that facilitate redevelopment, infill development, and new development that is consistent with the Land Use Plan, as funding is available.
- **Policy ED-5.2 Downtown infrastructure.** Ensure that sufficient infrastructure is provided to support the types of uses planned for the Downtown area, including an actionable plan for such upgrades.

Conservation Element

- **Policy COS-5.2 Water reuse.** Encourage property owners to install rainwater catchment and greywater systems in new developments or major retrofits.
- **Policy COS-5.3 Green infrastructure.** Install permeable paving, bioswales, and other green infrastructure components in new and significantly renovated hardscape projects.

5.19.3.6 LEVEL OF SIGNIFICANCE BEFORE MITIGATION

Upon implementation of regulatory requirements and standard conditions of approval, Impact 5.19-5 would be less than significant.

5.19.3.7 MITIGATION MEASURES

No mitigation measures required.

5.19.3.8 LEVEL OF SIGNIFICANCE AFTER MITIGATION

Impact 5.19-5 would be less than significant.

5.19.4 Solid Waste

5.19.4.1 ENVIRONMENTAL SETTING

Regulatory Background

Federal

Resource Conservation and Recovery Act

The Resource Conservation and Recovery Act of 1976 (Title 40 of the Code of Federal Regulations), Part 258, contains regulations for municipal solid waste landfills and requires states to implement their own permitting programs incorporating the federal landfill criteria. The federal regulations address the location, operation, design (liners, leachate collection, run-off control, etc.), groundwater monitoring, and closure of landfills.

State

California Green Building Standards Code

Section 5.408 (Construction Waste Reduction, Disposal, and Recycling) of CALGreen requires that at least 65 percent of the nonhazardous construction and demolition waste from nonresidential construction operations be recycled and/or salvaged for reuse. CALGreen is updated on a three-year cycle; the 2019 CALGreen took effect on January 1, 2020.

Assembly Bill 1327

The California Solid Waste Reuse and the Recycling Access Act of 1991 (AB 1327) is codified in Public Resources Code Sections 42900 to 42911. As amended, AB 1327 requires each local jurisdiction to adopt an ordinance requiring commercial, industrial, institutional, and residential buildings with five or more living units to provide an adequate storage area for the collection and removal of recyclable materials. The size of these storage areas is determined by the appropriate jurisdictions' ordinance.

Assembly Bills 939, 341, and 1826

Assembly Bill 939 (Integrated Solid Waste Management Act of 1989; Public Resources Code 40050 et seq.) established an integrated waste-management system that focused on source reduction, recycling, composting,

and land disposal of waste. AB 939 required every California city and county to divert 50 percent of its waste from landfills by the year 2000. Compliance with AB 939 is measured in part by comparing solid waste disposal rates for a jurisdiction with target disposal rates. Actual rates at or below target rates are consistent with AB 939. AB 939 also requires California counties to show 15 years of disposal capacity for all jurisdictions in the county or show a plan to transform or divert its waste.

Assembly Bill 341 (Chapter 476, Statutes of 2011) increased the statewide solid waste diversion goal to 75 percent by 2020. The law also mandates recycling for commercial and multifamily residential land uses as well as schools and school districts.

AB 1826, which was enacted in 2014, mandated organic waste recycling for businesses and multifamily dwellings with five or more units. The commercial organics recycling law took effect on April 1, 2016. As of September 2020, businesses and multifamily residences with five or more units that generate two or more cubic yards per week of solid waste (including recycling and organic waste) must arrange for organic waste recycling services. The bill requires each jurisdiction to report to CalRecycle on its progress implementing the organic waste recycling program, and CalRecycle reviews whether a jurisdiction is in compliance with the act.

Organic Waste Methane Emissions Reduction Act

In September 2016, SB 1383 established methane emissions reduction targets in a statewide effort to reduce emissions of short-lived climate pollutants in various sectors of California's economy. SB 1383 established goals to reduce the landfill disposal of organics by achieving a 50 percent reduction in the 2014 level of statewide disposal of organic waste by 2020 and a 75 percent reduction by 2025. SB 1383 granted CalRecycle the regulatory authority to achieve the organic waste disposal reduction targets and established an additional target that at least 20 percent of currently disposed edible food be recovered for human consumption by 2025.

SB 1383 also requires that no later than July 1, 2020, CalRecycle and the California Air Resources Board analyze the progress that the waste sector, State government, and local governments made in achieving the targets for reducing organic waste in landfills.

Local

Moorpark Municipal Code

Chapter 8.36, Solid Waste, of the municipal code provides a uniform procedure, regulation, and control for the collection and transportation of solid waste, discards, and recyclable commodities to a City-designated disposal site, and provides for the regulation and control of the collection and diversion of solid waste from disposal at landfills through recycling, composting, or transformation of recyclables. Section 8.36.640 requires project applicants to prepare a construction and demolition materials management plan that must indicate:

- The estimated weight of total project construction and demolition materials (C&D), by material type, that will be generated.
- The maximum weight of all C&D materials, by material type, that are feasible to divert, considering cost, energy consumption and delays, via reuse or recycling efforts.

- The vendor or facility that the applicant proposes to use to collect, divert, market, reuse, or receive the C&D materials, by type of material.
- The estimated weight or residual C&D materials that would be transported for disposal in a landfill or at a transformation facility.
- The estimated weight of inert waste, by waste type, to be removed from the waste stream and not disposed of in a solid waste landfill.

5.19.4.2 EXISTING CONDITIONS

Solid Waste Collection

Moorpark residential and commercial solid waste service is provided by Waste Management. Residential and commercial customers are provided separate bins for trash, recyclables, and yard wastes. Waste Management also offers free bulky item pick-up to Moorpark residents. Moorpark has contracts with household hazardous waste collectors in the cities of Camarillo and Simi Valley to properly dispose of hazardous waste.

Landfills

Solid waste generated in the city is primarily delivered to the Simi Valley Landfill, which received 98 percent of the city's landfilled waste in 2019 (CalRecycle 2022a). Located northwest of the city of Simi Valley, the Simi Valley Landfill and Recycling Center is a fully permitted nonhazardous municipal solid waste landfill and recycling facility. For over 30 years, the landfill has been serving the needs of residents in Ventura County and the west San Fernando Valley. It first opened in 1970, and Waste Management acquired the facility in 1983 (Waste Management 2022).

Solid waste disposed from the city in 2021 totaled 27,919 tons (CalRecycle 2022b). Table 5.19-11, *Landfill Summary*, provides more information on landfill capacity and closing date for the Simi Valley Landfill.

Table 5.19-11 Landfill Summary

Landfill Name	Maximum Permitted Throughput, tons per day	Average Disposal, tons per day[1]	Residual Disposal Capacity, tons per day	Remaining Capacity, cubic yards[2]	Estimated Closing Year
Simi Valley Landfill	10,792	4,850	5,942	82,954,873	2063

Source: CalRecycle 2022c, 2022d.
[1] Based on five days per week operation (300 days per year).
[2] Remaining capacity as of January 1, 2019.

AB 939 requires all counties to demonstrate that they have 15 years of available countywide solid waste landfill capacity, either in their jurisdiction, or contracted with another entity. The Simi Valley Landfill has 15 years of available landfill capacity.

Solid Waste Diversion

As discussed previously, the Integrated Waste Management Act (2000) requires all local jurisdictions to divert 50 percent of total annual solid waste tonnage to be recycled. Additionally, as discussed above, in 2008, the requirements were modified to reflect a per capita requirement, rather than tonnage. Each jurisdiction has both a per capita and per employee target diversion rate, which are calculated from the average of 50 percent of generation between base years 2003 through 2006, expressed in terms of per capita disposal. Disposal rates compared to disposal targets are one of several factors in determining a jurisdiction's compliance with AB 939; therefore, actual disposal rates at or below target disposal rates do not necessarily indicate compliance with AB 939.

The City's target disposal maximum rates are 6.0 pounds per capita per day and 17.9 pounds per employee per day. In 2020, the most recent year for which data are available, the actual disposal rates were 4.9 pounds per day per resident and 13.5 pounds per day per employee, which are both lower than target disposal rates and thus consistent with AB 939 (CalRecycle 2022e).

5.19.4.3 THRESHOLDS OF SIGNIFICANCE

According to Appendix G of the CEQA Guidelines, a project would normally have a significant effect on the environment if the project:

U-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.

U-5 Comply with federal, state, and local management and reduction statutes and regulations related to solid waste.

5.19.4.4 ENVIRONMENTAL IMPACTS

The following impact analysis addresses thresholds of significance. The applicable thresholds are identified in brackets after the impact statement.

Impact 5.19-6: Existing and/or proposed facilities would not be able to accommodate solid waste generated by development pursuant to the Moorpark General Plan 2050 and comply with related solid waste regulations. [Thresholds U-4 and U-5]

Solid waste disposed from the city is 27,919 tons/year under current conditions. The service population in Moorpark is anticipated to increase to 53,781 residents and 20,249 employees by the year 2050 (see Table 3-5, *Comparison of Existing Conditions to Buildout of the Moorpark General Plan 2050*). As shown in Table 5.19-12, *Projected Landfill Disposal,* this would result in a total of 41,866 tons/year that would be sent to the Simi Valley Landfill for disposal. This assumes that the current diversion rate for Moorpark remains the same. It is likely that with the expansion of organics and recycling programs, the diversion rate would increase in the future, resulting in a decrease in solid waste landfill disposal.

Table 5.19-12 Projected Landfill Disposal

Area	Existing Service Population	Existing Solid Waste Generation (tons/year)	Proposed Project Service Population	Percent Difference in Service Population	Proposed Project Solid Waste Generation (tons/year)
Moorpark	49,360	27,919	74,030	50% increase	41,866

Note: Service population is the sum of the total resident population and employees.

A total of 41,866 tons/year would equate to about 140 tons/day (assuming 300 disposal days/year). This amount would be about 2 percent of the current excess capacity of 5,942 tons/day at Simi Valley Landfill. In addition, these calculations conservatively assume that current diversion rates remain the same and there is no increased diversion rate for organics and recycling.

Furthermore, all development pursuant to the Moorpark General Plan 2050 would comply with Section 4.408 of the 2019 California Green Building Code Standards, which requires that at least 65 percent of nonhazardous construction and demolition waste from nonresidential construction operations be recycled and/or salvaged for reuse. The California Building Code and Moorpark Municipal Code also require a Construction and Demolition materials management plan prior to issuance of building permits for large projects. Furthermore, project-related construction and operation phases would comply with the following federal, state, and local laws and regulations that govern solid waste disposal:

- The Resource Conservation and Recovery Act of 1976 and the Solid Waste Disposal Act of 1965, which govern solid waste disposal.
- AB 939 (Integrated Solid Waste Management Act of 1989; Public Resources Code 40050 et seq.), which required diversion of 50 percent of waste from landfills and required each county to provide landfill capacity for a 15-year period.
- AB 1327 (California Solid Waste Reuse and Recycling Access Act of 1991) which requires local agencies to adopt ordinances mandating the use of recyclable materials in development projects.
- AB 341 that mandates recycling for commercial and multifamily residential land uses as well as schools and school districts. Businesses and housing that includes five or more units must also arrange for organic waste recycling services if they generate two or more cubic yards per week of solid waste (including recycling and organic waste) in accordance with AB 1826. Organic waste generation would be reduced in line with the targets set by SB 1383.

Policies LU-1.4, LU-1.5, and LU-17.8 of the Land Use Element promote the coordination of new development and redevelopment to ensure that the existing and planned capacity of public facilities and services are not adversely impacted. Policies LU-8.4 and LU-8.8 of the Land Use Element, Policies CI-12.2 through CI-12.9 of the Circulation Element, and Policies COS-6.2 and COS-6.3 of the Conservation Element all promote recycling and reuse and would further ensure compliance with solid waste regulations.

With continued compliance with the applicable regulations, leading to increased recycling and waste diversion and adherence to the Moorpark General Plan 2050 Policies, anticipated rates of solid waste disposal would be less than significant.

Level of Significance Before Mitigation: Less than significant.

5.19.4.5 RELEVANT GENERAL PLAN POLICIES

Land Use Element

- **Policy LU-1.4 Public services to support growth.** Coordinate new development and redevelopment of existing properties to ensure that the existing and planned capacity of public facilities and services shall not be adversely impacted.
- **Policy LU-1.5 Development timing.** Manage new development and redevelopment to ensure that it is orderly with respect to location, timing, and density/intensity; concurrent with the provision of local public services and facilities; and compatible with the overall community character.
- **Policy LU-8.4 Adaptive re-use of existing buildings.** Encourage the adaptive reuse of structures as a means of minimizing waste, capitalizing on a building's embodied energy, and supporting environmental sustainability.
- **Policy LU-8.8 Waste reduction and recycling.** Require that commercial, industrial, and manufacturing uses implement reuse, reduction, and recycling programs consistent with applicable State regulations.
- **Policy LU-17.8 Equitable access to infrastructure.** Support equitable access to a full complement of critical infrastructure and utilities for all residents and business.

Circulation Element

- **Policy CI-5.1 Adequate services and collection facilities.** Support efforts of the local solid waste collection, disposal, and recycling service providers to maintain adequate residential, commercial, and industrial solid waste and mixed recycling collection service levels and solid waste facilities in accordance with state law.
- **Policy CI-5.2 Waste Diversion.** Continue to partner, plan for, and document compliance with waste applicable State law related to source reduction and recycling requirements of 50% diversion of solid waste from landfills.
- **Policy CI-5.3 Recycling programs.** Continue to support the residential, commercial, industrial, and construction / demolition recycling programs to minimize the solid waste stream to landfills.
- **Policy CI-5.4 Electronic Waste Recycling.** The City shall coordinate with businesses that recycle electronic waste (e.g., batteries, fluorescent lamps, compact-fluorescent (CFL) bulbs) and the California

Product Stewardship Council, CalRecycle, and other pertinent agencies to provide convenient means of responsible disposal for city residents.

- **Policy CI-5.5 Clean up events.** Continue to sponsor clean-up events in which volunteers and community organizers help pick up litter in public areas.
- **Policy CI-5.6 Organic waste collection.** Continue to work with the City's waste haulers to provide organic waste collection services to residents and businesses and recycle organic materials, in compliance with applicable State law.
- **Policy CI-5.7 Organic waste recycling.** Continue to provide resources to support composting, grasscycling, and the recycling of organic waste.
- **Policy CI-5.8 Disposable, Toxic, or Non-Renewable Products.** The City shall reduce the use of disposable, toxic, or nonrenewable products in City operations.
- **Policy CI-5.9 Education and public information.** Prepare and disseminate, as appropriate, information to educate the public on source reduction, solid waste diversion, recycling, infectious waste management, and composting resources and educational programs.

Economic Development Element

- **Policy ED-5.2 Downtown infrastructure.** Ensure that sufficient infrastructure is provided to support the types of uses planned for the Downtown area, including an actionable plan for such upgrades.

Conservation Element

- **Policy COS-6.2 Recycling and composting access.** Expand access to recycling and composting services for homes and businesses.
- **Policy COS-6.3 Single-use plastics.** Explore options to decrease the use of single-use plastics and encourage the use of reusable materials.
- **Policy COS-6.4 Food waste.** Discourage food waste and remove barriers to donating food and composting.

5.19.4.6 LEVEL OF SIGNIFICANCE BEFORE MITIGATION

Upon implementation of regulatory requirements and standard conditions of approval, Impact 5.19-6 would be less than significant.

5.19.4.7 MITIGATION MEASURES

No mitigation required.

5.19.4.8 LEVEL OF SIGNIFICANCE AFTER MITIGATION

Impact 5.19-6 would be less than significant.

5.19.5 Other Utilities

This section focuses on transmission capacity and safety for energy systems. Evaluation of wasteful, inefficient energy use is evaluated in Section 5.6, *Energy*.

5.19.5.1 ENVIRONMENTAL SETTING

Regulatory Background

Federal

Natural Gas Pipeline Safety Act of 1968

The Natural Gas Pipeline Safety Act of 1968 authorizes the US Department of Transportation (DOT) to regulate pipeline transportation of flammable, toxic, or corrosive natural gas and other gases as well as the transportation and storage of liquefied natural gas. DOT's Pipeline and Hazardous Materials Safety Administration (PHMSA) develops and enforces regulations for the safe, reliable, and environmentally sound operation of the nation's 2.6 million miles of pipelines. DOT and PHMSA regulations governing natural gas transmission pipelines, facility operations, employee activities, and safety are in the Code of Federal Regulations (CFR)—49 CFR Parts 190 through 192, 49 CFR Part 195, and 49 CFR Part 199.

Pipeline Safety Improvement Act of 2002

The Pipeline Safety Improvement Act mandates that the DOT, the Department of Energy, and the National Institute of Standards and Technology in the Department of Commerce carry out a program of research, development, demonstration, and standardization to ensure the integrity of pipeline facilities. The purpose of the program is to identify safety and integrity issues and develop methodologies and technologies to characterize, detect, and manage risks associated with natural gas and hazardous liquid pipelines (PHMSA 2017).

Pipeline Inspection, Enforcement, and Protection Act of 2006

The Pipeline Inspection, Enforcement, and Protection Act confirms the commitment to the Integrity Management Program (IMP) and other programs enacted in the Pipeline Safety Improvement Act of 2002. The 2006 legislation includes provisions on:

- Preventing excavation damage to pipelines through the enhanced use and improved enforcement of state "One-Call" laws that preclude excavators from digging until they contact the state One-Call system to locate the underground pipelines.
- Minimum standards for IMPs for distribution pipelines (including installation of excess flow valves on single-family residential service lines based on feasibility and risk).

- Standards for managing gas and hazardous liquid pipelines to reduce risks associated with human factors (e.g., fatigue).
- Authority to waive safety standards in emergencies.
- Authority to assist in restoration of disrupted pipeline operations.
- Review and update incident reporting requirements.
- Requirements for senior executive officers to certify operator integrity management performance reports.
- Clarification of jurisdiction between states and PHMSA for short laterals that feed industrial and electric generator consumers from interstate natural gas pipelines. (INGAA 2019)

Pipeline Safety, Regulatory Certainty, and Job Creation Act of 2011

The Pipeline Safety, Regulatory Certainty, and Job Creation Act of 2011 was designed to examine and improve the state of pipeline safety regulation. The act:

- Reauthorizes PHMSA's federal pipeline safety programs through fiscal year 2015.
- Provides the regulatory certainty necessary for pipeline owners and operators to plan infrastructure investments and create jobs.
- Improves pipeline transportation by strengthening enforcement of current laws and improving existing laws where necessary.
- Ensures a balanced regulatory approach to improving safety that applies cost-benefit principles.
- Protects and preserves Congressional authority by ensuring certain key rulemakings are not finalized until Congress has an opportunity to act. (PHMSA 2019)

National Energy Policy

Established in 2001 by the National Energy Policy Development Group, this policy is designed to help the private sector and state and local governments promote dependable, affordable, and environmentally sound production and distribution of energy for the future. Key issues addressed by the energy policy are energy conservation, repair, and expansion of energy infrastructure, and ways of increasing energy supplies while protecting the environment.

Federal Communication Commission Regulations

The Federal Communications Commission (FCC) regulates interstate and international communications by radio, television, wire, satellite and cable in all 50 states, the District of Columbia and US territories. FCC's regulatory powers include setting manufacturing standards for communications equipment, decency standards in radio and television broadcasts, and ensuring competition.

State

California Public Utility Commission

The California Public Utilities Commission regulates privately owned telecommunications, electric, natural gas, water, railroad, rail transit, and passenger transportation companies, in addition to authorizing video franchises. Among the commission's goals for energy regulation are: establish service standards and safety rules, authorize utility rate changes, oversee markets to inhibit anti-competitive activity, prosecute unlawful utility marketing and billing activities, govern business relationships between utilities and their affiliates, resolve complaints by customers against utilities, implement energy efficiency and conservation programs and programs for low-income and disabled people, oversee the merger and restructure of utility corporations, and enforce the California Environmental Quality Act (CEQA) for utility construction.

California Energy Commission

The California Energy Commission (CEC) was created in 1974 as the state's principal energy planning organization in order to meet the energy challenges facing the state in response to the 1973 oil embargo. The CEC is charged with six basic responsibilities when designing state energy policy:

- Forecast statewide electricity needs.
- License power plants to meet those needs.
- Promote energy conservation and efficiency measures.
- Develop renewable energy resources and alternative energy technologies.
- Promote research, development and demonstration.
- Plan for and direct the state's response to energy emergencies.

AB 802: California Energy Benchmarking and Disclosure

On October 8, 2015, AB 802 directed the CEC to establish a statewide energy benchmarking and disclosure program and enhanced the CEC's existing authority to collect data from utilities and other entities for the purposes of energy forecasting, planning, and program design. Among its specific provisions, AB 802 requires utilities to maintain records of the energy usage data of all buildings to which they provide service for at least the most recent 12 complete months. AB 802 requires each utility, upon the request and authorization of the owner, owner's agent, or operator of a covered building, to deliver or provide aggregated energy usage data for a covered building to the owner, owner's agent, operator, or to the owner's account in the Energy Star Portfolio Manager, subject to specified requirements. AB 802 also authorized the CEC to specify additional information to be delivered by utilities for certain purposes.

Existing Conditions

Electricity and Natural Gas

Electric power is provided to the City of Moorpark by Southern California Edison (SCE) and Clean Power Alliance. Natural gas is provided by the Southern California Gas Company (SoCalGas). Information related to the three providers, including total electricity and natural gas consumption, can be found in Section 5.6.1.2, which also includes existing electricity and natural gas consumption in the City of Moorpark.

Internet, phone, and satellite television services are currently provided by a variety of private sources, including AT&T, Sprint, Verizon, T-Mobile, and Spectrum.

Telephone and Cellular Phone Service

Local telephone services in the City of Moorpark are provided by AT&T, which also provides long distance phone service, wireless high-speed internet service, wireless phone service, and digital satellite TV.

Cellular phone service providers in the city include AT&T, Sprint, Verizon, and T-Mobile. AT&T recently installed two small cell facilities in the city on Spring Road and Poindexter Avenue, and additional facilities are currently in the application process. Although these facilities are not currently operating at 5G, they could be upgraded to 5G in the future.

Internet Service and Cable Television

Internet and cable television services in the city are provided by several providers, including AT&T and Spectrum. Fiber internet access is available to residential areas in the city; however, not all of the city's commercial and industrial districts have the same accessibility to internet. In response, the City is in the process of developing a broadband strategic plan with the focus on broadband deployment in these districts. The broadband strategic plan will analyze the existing and potential fiber-optic paths and determine the city's current underserved and unserved areas.

5.19.5.2 THRESHOLDS OF SIGNIFICANCE

According to Appendix G of the CEQA Guidelines, a project would normally have a significant effect on the environment if the project:

U-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.

5.19.5.3 ENVIRONMENTAL IMPACTS

The following impact analysis addresses thresholds of significance, which are identified in brackets after the impact statement.

Impact 5.19-7: Development pursuant to the Moorpark General Plan 2050 would not require or result in the relocation or construction of new or expanded electric power, natural gas, or telecommunication facilities. [Threshold U-1]

Electricity Infrastructure

Development pursuant to the Moorpark General Plan 2050 would be provided with electricity by SCE via existing infrastructure in the immediate area. SCE obtains electricity from conventional and renewable sources. As shown in Table 5.6-3, *Year 2050 Forecast Electricity Consumption*, by horizon year 2050, electricity use in the City would increase by 85,344,131 kilowatts (85 gigawatts). The total electricity consumption in SCE's service

area was 103,597 gigawatts per hour in 2020 (CEC 2022b). The projected net increase in electricity demand for the City accounts for less than 1 percent of SCE's total demand. This increase represents a modest increase in electricity demand when considered in the context of SCEs service territories. As a result, development associated with the Moorpark General Plan 2050 would not result in the need for new infrastructure, such as substations, regional transmission lines, or new/expanded power plants.

Natural Gas Infrastructure

As shown in Table 5.6-4, *Year 2050 Forecast Natural Gas Consumption*, existing natural gas use in the city totals 6,698,164 therms. By 2050, natural gas use in the city would increase by 3,254,225 therms (or approximately 3.3 million therms). The total natural gas consumption in the SoCalGas service area was approximately 6,951 million therms in 2020 (CEC 2022d). The total projected net increase in natural gas consumption for the city would amount to less than 1 percent of the overall demand in SoCalGas' service area and would represent a minimal increase in demand.

Telecommunications Infrastructure

Development pursuant to the Moorpark General Plan 2050 would connect to existing telecommunication services, which include AT&T, Sprint, Verizon, T-Mobile, Spectrum, and others. All telecommunications companies are subject to federal FCC regulations and the California Public Utility Code. Additionally, after completion of the City's broadband strategic plan, goals and policies in the Moorpark General Plan 2050 can help ensure wired and wireless services are available in all areas of the city and promote 5G technology.

Summary

Therefore, development pursuant to the Moorpark General Plan 2050 would not result in a substantial increase in electrical, natural gas, and telecommunication service demands such that service providers would need to expand their supply and transmission facilities. Also, no significant expansion or construction of the telecommunications network is anticipated.

Any development pursuant to the Moorpark General Plan 2050 would be required to comply with energy efficiency standards in Title 24 of the California Administrative Code, appliance efficiency regulations in Title 20 of the California Administrative Code, CALGreen, and policies of the Moorpark General Plan 2050. Moorpark General Plan 2050 policies support the coordination of new development to ensure that the existing and planned capacity of public facilities would not be adversely impacted, encourage developers to exceed standards for building design and construction specified by the CALGreen with goals of achieving net zero energy use, and promote large-scale industrial development projects to provide on-site alternative energy sources. The policies also promote the continued collaboration with local utility providers to ensure that adequate electricity and natural gas services are available for existing and newly developing areas and support the increased use of renewable energy sources.

Furthermore, Policies LU-1.4, LU-1.5, and LU-17.8 of the proposed Land Use Element and Policies CI-13.1 through CI-13.6, and CI-13.9 of the proposed Circulation Element promote the coordinated timing of future development and redevelopment with existing and planned infrastructure to ensure public facilities would not

be adversely impacted, including in emergency situations. Policies LU-8.1 and LU-8.2 of the proposed Land Use Element; Policy CI-13.7 of the proposed Circulation Element; Policy OSPR-1.2 of the proposed Open Space, Parks and Recreation Element; Policy SE-5.8 of the proposed Safety Element; and Policies COS-4.1 through COS-4.4 and COS-4.8 through COS-4.10 of the proposed Conservation Element encourage the efficient use of energy, energy conservation practices including retrofits, and the use of renewable energy and energy storage.

Impacts to electricity, natural gas, and telecommunications facilities would be less than significant.

Level of Significance Before Mitigation: Less than significant.

5.19.5.4 RELEVANT GENERAL PLAN POLICIES

Land Use Element

- **Policy LU-1.4 Public services to support growth.** Coordinate new development and redevelopment of existing properties to ensure that the existing and planned capacity of public facilities and services shall not be adversely impacted.

- **Policy LU-1.5 Development timing.** Manage new development and redevelopment to ensure that it is orderly with respect to location, timing, and density/intensity; concurrent with the provision of local public services and facilities; and compatible with the overall community character.

- **Policy LU-8.1 Model of environmental sustainability.** Establish Moorpark as a leader of land use development practices that contribute to the sustainability and stewardship of environmental resources including air quality protection, energy and water efficiency, natural resource conservation, greenhouse gas reduction, and climate change resiliency.

- **Policy LU-8.2 Reduction of energy and water use.** Encourage developers to exceed standards for building design and construction specified by the California Green Building Standards Code, with goals of achieving net zero energy and water use.

- **Policy LU-17.8 Equitable access to infrastructure.** Support equitable access to a full complement of critical infrastructure and utilities for all residents and business.

Circulation Element

- **Policy CI-13.1 Adequate service and facilities.** Continue to work with local utility providers to ensure that adequate electricity and natural gas services are available for existing and newly developing areas.

- **Policy CI-13.5 Backup Energy Provision.** Work with utility providers to ensure adequate backup energy provisions for critical public facilities and wireless infrastructure and upgrade as needed.

- **Policy CI-13.6 Microgrids.** Work with utility providers and local energy service providers to explore the use of microgrids allowing locally-generated renewable energy networks to supplement the electrical distribution system and provide back-up power in the event of an emergency.
- **Policy CI-13.7 Energy Conservation.** Support increased use of renewable energy sources through energy conservation, efficiency, and renewable resource strategies, as identified in The Conservation Element.
- **Policy CI-13.8 Service Disruptions.** Continue to work with local utility providers to prevent unplanned disruptions to utility service.
- **Policy CI-13.1 Adequate facilities and equitable access.** Work with telecommunications service providers to meet the facility and service demands of existing and future development and to provide equitable access to telecommunications infrastructure for all City residents.

Economic Development Element

- **Policy ED-4.3 Infrastructure and capital improvements.** Invest in infrastructure and capital improvements that facilitate redevelopment, infill development, and new development that is consistent with the Land Use Plan, as funding is available.
- **Policy ED-5.2 Downtown infrastructure.** Ensure that sufficient infrastructure is provided to support the types of uses planned for the Downtown area, including an actionable plan for such upgrades.

Open Space, Parks and Recreation Element

- **Policy OSPR-1.12 Sustainability features.** Require that new parks are designed, and existing parks are retrofitted over time, to incorporate sustainable development and landscape practices that reduce water and energy consumption.

Conservation Element

- **Policy OSPR-4.1 New building energy efficiency.** Encourage new buildings to exceed state energy efficiency requirements where cost-effective and equitable, including through the use of improved insulation, all-electric heating and cooling systems, and high-efficiency appliances.
- **Policy OSPR-4.2 Passive energy conservation.** Require that buildings in large scale commercial, mixed-use, and planned development projects include, to the extent feasible, passive energy-conservation strategies including, but not limited to, location and orientation.
- **Policy OSPR-4.3 Energy efficiency improvements.** Work with property owners to conduct energy efficiency retrofits and other improvements to existing buildings, particularly rental units and buildings constructed before 1980. Emphasize ways to improve the energy efficiency of existing buildings that are equitable and cost-effective.

- **Policy OSPR-4.4 Low-cost energy efficiency.** Enact widespread energy efficiency and conservation practices that are accessible and feasible for most or all of the community, including low-cost and free actions and those with accelerated payback periods.
- **Policy OSPR-4.8 Energy use at City facilities.** Retrofit City facilities to improve energy efficiency, decrease electric and natural gas use, and install renewable energy and energy storage systems.
- **Policy OSPR-4.9 Green building practices.** Provide information about, and encourage, incorporating additional green building practices into new development and major retrofits, including active and passive energy-conservation strategies, low-carbon, sustainable building materials, and reuse of building materials.
- **Policy OSPR-4.10 Regional energy collaboration.** Collaborate with the Ventura County Regional Energy Alliance, the Clean Power Alliance, and other regional energy groups to promote educational campaigns and financial incentives for energy efficiency and conservation, renewable energy, and energy storage.

Safety Element

- **Policy SE-5.7 Sustainable and resilient facilities.** Encourage new developments and existing property owners to incorporate sustainable, energy-efficient, and environmentally regenerative features into their facilities, landscapes, and structures to reduce energy demands and improve on-site resilience. Support financing efforts to increase the communities funding of these features.

5.19.5.5 LEVEL OF SIGNIFICANCE BEFORE MITIGATION

Upon implementation of regulatory requirements and standard conditions Impact 5.19-7 would be less than significant.

5.19.5.6 MITIGATION MEASURES

No mitigation required.

5.19.5.7 LEVEL OF SIGNIFICANCE AFTER MITIGATION

Impact 5.19-7 is less than significant.

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5.20 WILDFIRE

This section of the Draft Environmental Impact Report (DEIR) describes the regulatory framework for wildfire management and protection, existing conditions for wildfire, evacuation planning, and postfire flooding or landslides in the City of Moorpark. The existing conditions include a description of previous wildfire events in the city and surrounding areas. This section also includes a discussion of potential impacts of the Moorpark General Plan 2050 on wildfire.

5.20.1 Environmental Setting

5.20.1.1 REGULATORY BACKGROUND

Federal Regulations

National Cohesive Wildfire Management Strategy

In the Federal Land Assistance, Management, and Enhancement Act of 2009 (FLAME Act), Congress mandated the development of a National Cohesive Wildland Fire Management Strategy for all lands in the United States. Wildfire management is guided by the National Cohesive Wildland Fire Management Strategy, which has three primary goals (USDI and USDA 2014):

- Resilient landscapes
- Fire adapted communities
- Safe and effective wildfire response

These three goals enable land managers to manage vegetation and fuels; protect homes, communities, and other values at risk; manage human-caused ignitions; and effectively and efficiently respond to wildfires. California is part of the Western Regional Strategy Committee, chartered to support and facilitate the implementation of the National Cohesive Wildland Fire Strategy.

National Fire Protection Association Standards

National Fire Protection Association (NFPA) codes, standards, recommended practices, and guides are developed through a consensus standards development process approved by the American National Standards Institute. NFPA standards are recommended (advisory) guidelines for fire protection that are referenced in the California Fire Code, which is adopted by the City of Moorpark every three years. Specific standards applicable to wildland fire hazards include, but are not limited to:

- **NFPA 1141,** Fire Protection Infrastructure for Land Development in Wildlands
- **NFPA 1142,** Water Supplies for Suburban and Rural Fire Fighting
- **NFPA 1143,** Wildland Fire Management
- **NFPA 1144,** Reducing Structure Ignition Hazards from Wildland Fire

- **NFPA 1710,** Standard for the Organization and Deployment of Fire Suppression Operations, Emergency Medical Operations

State Regulations

California Department of Forestry and Fire Protection

The California Department of Forestry and Fire Protection (CAL FIRE) is dedicated to the fire protection and stewardship of over 31 million acres of California's wildlands. CAL FIRE provides fire assessment and firefighting services for land in State Responsibility Areas, conducts educational and training programs, provides fire planning guidance and mapping, and reviews general plan safety elements to ensure compliance with state fire safety requirements.

The Board of Forestry and Fire Protection is a government-appointed approval body within CAL FIRE. It is responsible for developing the general forest policy of the state, determining the guidance policies of CAL FIRE, and representing the state's interest in federal forestland in California. The Board of Forestry and Fire Protection also promulgates regulations and approves general plan safety elements that are adopted by local governments for compliance with State statutes.

The California Office of the State Fire Marshal supports the mission of CAL FIRE by focusing on fire prevention. These responsibilities include regulating buildings in which people live, congregate, or are confined; controlling substances and products which may, in and of themselves, or by their misuse, cause injuries, death and destruction by fire; providing statewide direction for fire prevention within wildland areas; regulating hazardous liquid pipelines; developing and renewing regulations and building standards; and providing training and education in fire protection methods and responsibilities. These are accomplished through major programs including engineering, education, enforcement, and support from the Board of Forestry and Fire Protection. For jurisdictions in state responsibility areas or very high fire hazard severity zones, the Land Use Planning Program division of the Office of State Fire Marshal reviews safety elements during the update process to ensure consistency with California Government Code, Section 65302(g)(3).

Together, the Board of Forestry and Fire Protection, Office of State Fire Marshal, and CAL FIRE protect and enhance the forest resources of all wildland areas of California that are not under federal jurisdiction.

Fire Hazard Severity Zones and Responsibility Areas

CAL FIRE designates fire hazard severity zones as authorized under California Government Code Sections 51175 et seq. CAL FIRE considers many factors when designating fire severity zones, including fire history, existing and potential vegetation fuel, flame length, blowing embers, terrain, and weather patterns for the area. CAL FIRE designates fire hazard severity zones (FHSZ) in three types of areas depending on which level of government is financially responsible for fire protection:

- **LRA: Local Responsibility Area.** Incorporated communities are financially responsible for wildfire protection. There is one severity zone in the LRA, the very high FHSZ.

- **SRA: State Responsibility Area.** CAL FIRE and contracted counties are financially responsible for wildfire protection. There are three FHSZs—moderate, high, and very high.
- **FRA: Federal Responsibility Area.** Federal agencies such as the United States Forest Service, National Park Service, Bureau of Land Management, United States Department of Defense, United States Fish and Wildlife Service, and Department of the Interior are responsible for wildfire protection.

2018 Strategic Fire Plan for California

CAL FIRE produced the 2018 Strategic Fire Plan for California, with goals, objectives, and policies to prepare for and mitigate the effects of fire on California's natural and built environments (BFFP 2018). The 2018 Strategic Plan focuses on fire prevention and suppression activities to protect lives, property, and ecosystems in addition to providing natural resource management to maintain state forests as a resilient carbon sink to meet California's climate change goals. A key component of the 2018 Strategic Plan is the collaboration between communities to ensure fire suppression and natural resource management is successful (BFFP 2018).

2021 California's Wildfire and Forest Resilience Action Plan

The Governor's Forest Management Task Force developed California's Wildfire and Forest Resilience Action Plan, which is a framework for establishing healthy and resilient forests that can withstand and adapt to wildfire, drought, and climate change. This plan accelerates efforts to restore the health and resilience of California's forests, grasslands, and natural places; improves the fire safety of communities; and sustains the economic vitality of rural forested areas. CAL FIRE, in partnership with the US Forest Service, intends to scale up forest thinning and prescribed fire; integrate climate adaptation into the statewide network of regional forest and community fire resilience plans; improve the electricity grid resilience, and promote sustainable land use.

State Responsibility Area and Very High Fire Hazard Severity Zone Fire Safe Regulations

California Code of Regulations Title 14, Division 1.5, Chapter 7, Subchapter 2, SRA/VHFHSZ Fire Safe Regulations, establishes minimum wildfire protection standards for construction and development in the SRA and very high FHSZ and requires CAL FIRE to review development proposals and enact recommendations that serve as conditions of approval in these zones. These standards include basic emergency access and perimeter wildfire protection measures; signing and building numbering; private water supply resources for emergency fire use; and vegetation modification. These regulations apply to all residential, commercial, and industrial buildings in the SRA, the siting of new mobile homes, all tentative and parcel maps, and applications for building permits approved before 1991 where these standards were not proposed. Fire Safe Regulations also include a minimum setback of 30 feet for all buildings from property lines and/or the center of a road. Section 1273.08, Dead-End Roads, of these standards provide regulations for the maximum lengths of single access roadways requiring the following:

- Parcels zoned for less than one acre: 800 feet
- Parcels zoned for 1 acre to 4.99 acres: 1,320 feet

- Parcels zoned for 5 acres to 19.99 acres: 2,640 feet
- Parcels zoned for 20 acres or larger: 5,280 feet

Fire Safe Regulations, Section 1299.03, Fire Hazard Reduction Around Buildings and Structure Requirements, provides defensible space requirements for areas within 30 feet of a structure (Zone 1) and between 30 and 100 feet from a structure (Zone 2). In Zone 1, all dead and dying plants must be removed, as must any flammable vegetation that could catch fire. In Zone 2, horizontal and vertical spacing among shrubs and trees must be created and maintained.

Public Resources Code Section 4291

Public Resources Code Section 4291, Mountainous, Forest-, Brush- and Grass-Covered Lands, is intended for any person who owns, lease, controls, operates, or maintains a building or structure in a mountainous area, forest-covered lands, shrub-covered lands, grass-covered lands, or land that is covered with flammable material, regardless of whether the property is in an SRA or very high FHSZ. This section requires defensible space to be maintained within 100 feet from each side of a structure. An ember-resistant zone is also required within 5 feet of a structure and more intense fuel reduction between 5 and 30 feet of a structure.

California Building Standards Code

The California Buildings Standards Code (California Code of Regulations Title 24) provides 12 different codes for construction and buildings in California. This code is updated every three years, with the most recent version effective January 1, 2020, and the next version going into effect January 1, 2023. Moorpark regularly adopts the most recent version of the California Building Standards Code, with modifications, into the Moorpark Municipal Code, Title 15, Building and Construction.

Building Design Standards

The California Building Code (CBC), Part 2 of 24 California Code of Regulations, identifies building design standards, including those for fire safety. It is effective statewide, but a local jurisdiction may adopt more restrictive standards based on local conditions under specific amendment rules prescribed by the State Building Standards Commission. Residential buildings are plan checked by local city building officials for compliance with the CBC and any applicable local edits. Typical fire safety requirements of the CBC include the installation of sprinklers in buildings and other facilities; the establishment of fire-resistance standards for fire doors, building materials, and particular types of construction in high fire hazard severity zones; requirements for smoke-detection systems; exiting requirements; and the clearance of debris.

Materials and Methods for Exterior Wildfire Exposure

Chapter 7A of the CBC, Materials and Methods for Exterior Wildfire Exposure, prescribes building materials and construction methods for new buildings in a Fire Hazard Severity Zone or Wildland Interface Fire Area. Chapter 7A contains requirements for roofing; attic ventilation; exterior walls; exterior windows and glazing; exterior doors; decking; protection of underfloor, appendages, and floor projections; and ancillary structures. Other requirements include vegetation management compliance, as prescribed in California Fire Code Section 4906 and Public Resources Code 4291.

California Fire Code

The California Fire Code incorporates, by adoption, the International Fire Code of the International Code Council, with California amendments. This is the official fire code for the State and all political subdivisions. It is found in California Code of Regulations Title 24, Part 9 and, like the CBC, the California Fire Code is effective statewide, but a local jurisdiction may adopt more restrictive standards based on local conditions. The California Fire Code is a model code that regulates minimum fire safety regulations for new and existing buildings; facilities; storage; processes, including emergency planning and preparedness; fire service features; fire protection systems; hazardous materials; fire flow requirements; and fire hydrant locations and distribution. Typical fire safety requirements include installation of sprinklers in all buildings; the establishment of fire resistance standards for fire doors, building materials, and particular types of construction; and the clearance of debris and vegetation within a prescribed distance from occupied structures in wildfire hazard areas.

Wildland-Urban Interface Areas

Chapter 49 of the California Fire Code, Requirements for Wildland Urban Interface Fire Areas, applies to any geographical area identified as a FHSZ by CAL FIRE. It defines FHSZs, connects to the SRA Fire Safe Regulation requirements for defensible space, and parallels requirements for wildfire protection buildings construction and hazardous vegetation fuel management in other sections of the California Code of Regulations and the Public Resources Code. Chapter 49 of the 2022 California Fire Code, which goes into effect January 1, 2023, includes a definition for the Wildland-Urban Interface (WUI) and provides requirements for fire protection plans, landslide plans, long-term vegetation management, and creation and maintenance of defensible space for all new development within the WUI.

California Public Utilities Commission

In 2007, wildfires in southern California were ignited by overhead utility power lines and aerial communication facilities near power lines. In response, the California Public Utilities Commission began considering and adopting regulations to protect the public from fire hazards posed by overhead power lines and nearby aerial communication facilities. The commission published a fire threat map—under Rulemaking 15-05-006, following procedures in Decision 17-01-009, revised by Decision 17-06-024—that adopted a work plan for the development of a utility high fire-threat district where enhanced fire safety regulations in Decision 17-12-024 apply (CPUC 2022a). The fire regulations require electrical utilities to:

- Prioritize the correction of safety hazards.
- Correct nonimmediate fire risks in "Tier 2" (elevated fire threat) areas in the high fire-threat district within 12 months, and in "Tier 3" (extreme fire threat) areas within 6 months.
- Maintain increased clearances between vegetation and power lines in the high fire-threat district.
- Maintain stricter wire-to-wire clearances for new and reconstructed facilities in Tier 3 areas.
- Conduct annual inspections of overhead distribution facilities in rural areas of Tier 2 and Tier 3 areas.

- Prepare a fire prevention plan annually if overhead facilities exist in the high fire-threat district. (CPUC 2022b)

California Government Code

California Government Code Section 65302(g) and Section 65302.15 require that safety elements be reviewed and revised as needed with the revision of a housing element or local hazard mitigation plan, but no less than every eight years, to ensure the goals, policies, actions, mapping, and background content are consistent with State regulations and reflect the best available information for wildfire risks, climate adaptation and resiliency, and emergency evacuation routes for certain residential areas. Communities with local hazard mitigation plan updates after January 1, 2022, must also ensure their safety elements or local hazard mitigation plans include an assessment of evacuation routes and their capacity, safety, and viability as well as evacuation locations under a range of emergency scenarios.

For wildfire and evacuation purposes, a safety element must:

- Identify wildfire hazards with the latest fire severity zone maps from the Board of Forestry and Fire Protection, US Geological Survey, and other sources.
- Consider guidance given by the Office of Planning and Research's Fire Hazard Planning document.
- Demonstrate that the jurisdiction or contract agency and associated codes satisfactorily address adequate water supply, egress requirements, vegetation management, street signage, land use policies, and other criteria to protect from wildfires.
- Establish in the safety element (and other elements that must be consistent with it) a set of comprehensive goals, policies, and feasible implementation measures for protection of the community from unreasonable risks of wildfire.
- Identify evacuation constrains residential parcels in hazard prone areas.

Governor's Office of Planning and Research Fire Hazard Technical Advisory

The Governor's Office of Planning and Research published the Fire Hazard Technical Advisory in 2015 and revised it in 2022 as a planning guide for addressing fire hazards, reducing risk, and increasing resilience across California's diverse communities and landscapes. The guide provides a range of goals, policies, and programs for fire hazard prevention and mitigation, disaster preparedness, and emergency response and recovery. The 2022 update includes specific land use strategies to reduce fire risk to buildings, infrastructure, and communities.

Regional Regulations

Ventura County Multi-jurisdictional Hazard Mitigation Plan, Moorpark Annex

The purpose of hazard mitigation planning is to reduce the loss of life and property by minimizing the impact of disasters. The Ventura County Multi-Jurisdictional Hazard Mitigation Plan (MHMP), updated in 2022 in accordance with the Federal Disaster Mitigation Action of 2000 (DMA 2000), provides an assessment of natural hazards in the county and a set of short-term mitigation actions to reduce or eliminate the long-term risk to people and property from these hazards. The Moorpark Annex of the MHMP provides an assessment and mitigation actions for Moorpark specifically while considering the results from the countywide effort. In the context of an MHMP, mitigation is an action that reduces or eliminates long-term risk to people and property from hazards, including wildfire. Mitigation actions related to wildfire in Volume 2, Chapter 4 of the MHMP Moorpark Annex include retrofitting, purchasing, or relocating structures that are in hazard areas; integrating the MHMP into the City's Emergency Operations Plan and General Plan; purchasing generators for critical facilities and infrastructure that lack adequate backup power; and maintaining a vegetation management program that provides services to elderly, disabled, and low-income property owners.

The MHMP must be reviewed and approved by FEMA every five years to maintain eligibility for disaster relief funding. As part of this process, the California Governor's Office of Emergency reviews all local hazard mitigation plans in accordance with DMA 2000 regulations and coordinates with local jurisdictions to ensure compliance with FEMA's Local Mitigation Plan Review Guide. As part of the proposed project, the MHMP is adopted in its entirety into the proposed Safety Element by reference.

Ventura County Community Wildfire Protection Plan

The Ventura County Community Wildfire Protection Plan identifies and prioritizes prefire and postfire management strategies and tactics meant to reduce the loss of values at risk throughout the county. The Ventura County Community Wildfire Plan has been developed upon the priority goals and objectives identified by CAL FIRE, Ventura County, and local collaborators. The two primary components of fire prevention in this plan are vegetation management projects where wildfires threaten both human-made and natural systems, and wildfire safety education programs. Additional methods to reduce wildfire hazards in this plan include creating ignition-resistant structures through roofing materials, structure extension and openings, defensible space, and firefighting equipment access to structures. The strategies in this plan will be implemented in cooperation with the Ventura County Fire Department and the Ventura Regional Fire Safe Council.

Local Regulations

Moorpark Municipal Code

The Moorpark Municipal Code includes various directives to minimize adverse impacts associated with wildfires in and surrounding Moorpark. Most provisions related to wildfire and evacuation are in the following chapters:

- **Chapter 12.20, Underground Utilities.** This chapter allows the Moorpark City Council to create underground utility districts, in consultation with local utilities and property owners, to incentivize the removal of overhead utility structures and underground installation of these structures. Once created, it is unlawful to construct poles, overhead wires, and associated overhead structures in the district.

- **Chapter 15.04, Administrative Provisions.** This chapter contains two sections relevant to wildfire hazards and evacuation: Section 15.04.050, Fire Prevention, and Section 15.04.100, Disaster Response. Section 15.04.050 adopts the provisions of the Ventura County Fire Code, which include the California Fire Code, for the construction and operation of structures in Moorpark. Section 15.04.100 enables the city manager to enter into mutual aid agreements for emergency building and safety services to ensure effective response to emergencies.

- **Chapter 15.08, Building Code.** This chapter adopts the California Building Code into the Moorpark Municipal Code. Additionally, Section 15.08.060, Fire Hazard Zone Requirements, defines a high fire hazard zone as any area within 500 feet of uncultivated brush-, grass-, or forest-covered land. Buildings in this zone must comply with specific roofing, exterior wall, and underfloor area requirements.

- **Chapter 15.24, Floodplain Management.** This chapter provides methods for reducing flood losses through restricting or prohibiting uses that could endanger the health, safety, and property in the city; requires that uses vulnerable to flooding be protected against flood damage; provides for flood control infrastructure and prevents grading or dredging that may increase flood damage; and regulates the construction of flood barriers that divert floodwaters or increase flood hazards.

- **Chapter 17.38, Hillside Management.** This chapter provides requirements for development in the hillside areas of the city, consistent with the General Plan. Requirements include minimizing erosion and geologic hazards due to development; minimizing the impacts of large cut-and-fill slopes; maintaining natural drainage patterns; reducing water use in slope replanting; and retaining the integrity and natural grade elevation of natural ridgelines.

Moorpark Emergency Operations Plan

The Moorpark Emergency Operations Plan, adopted in 2022, provides planned response actions for emergency events throughout the city and in coordination with Ventura County. The plan establishes the emergency management organization required to response to significant emergencies and disasters, identifies the roles and responsibilities required to protect Moorpark community members, and establishes the operational concepts for different emergencies, the Emergency Operations Center, and recovery processes. The plan also provides direction for specific emergency processes such as responding to Public Safety Power Shutoffs, infectious diseases and pandemics, dam inundation, and mass care and shelter.

5.20.1.2 EXISTING CONDITIONS

Wildfire Background

The term "wildfire" refers to fires that usually result from the ignition of dry grass, brush, or timber. Historically, wildfires commonly occurred in steep or heavily vegetated areas, which makes suppression of the fire difficult. More recently, wildfires have been encroaching into more urban areas, that is, the WUI, threatening homes, businesses, and essential infrastructure. Though wildfires play an important role in the ecology of many natural habitats, risks to human safety and property increase as urban development moves into areas susceptible to wildfire hazards.

Types of Wildfires

There are three basic types of wildfires:

- **Crown fires** burn trees to their tops and are the most intense and dangerous wildland fires.
- **Surface fires** burn surface litter and duff and are known for being the easiest fires to extinguish and causing the least damage. Brush and small trees enable surface fires to reach treetops, and so are referred to as *ladder fuels*.
- **Underground fires** occur underground in deep accumulations of dead vegetation. These fires move very slowly and can be difficult to extinguish due to limited access. (Natural Resources Canada 2018)

Wildfires burn in many types of vegetation—forest, woodland, scrub, chaparral, and grassland. Many species of native California plants are adapted to fire, and habitats such as chaparral shrubs and conifer forests can recover from fire. For example, some species of chaparral plants, such as ceanothus, require intense heat for germination and therefore have flammable resins on leaves and roots that can quickly sprouts up in burned areas (National Park Service 2018). Between 2010 and 2017, wildfires in California burned about 265,000 acres of forest land, 207,000 acres of scrub vegetation, 99,000 acres of grassland, 18,000 acres of desert vegetation, and 14,000 acres of other vegetation types (BFFP 2018). Wildfires have been observed to be more frequent and growing in intensity over the past several years, with 4,304,379 acres and 2,568,948 acres burning in 2020 and 2021, respectively (CAL FIRE 2022).

Wildfire Causes

Although the term *wildfire* suggests natural origins, a 2017 study that evaluated 1.5 million wildfires in the United States between 1992 and 2012 found that humans were responsible for igniting 84 percent of wildfires, accounting for 44 percent of acreage burned (Balch et al. 2017). The three most common types of human-caused wildfires are debris burning (logging slash, farm fields, trash, etc.); arson; and equipment use (Pacific Biodiversity Institute 2007). Power lines can also ignite wildfires through downed lines, vegetation contact, conductors that collide, and equipment failures (Texas Wildfire Mitigation Project 2018). CAL FIRE determined that between 2017 and 2021, 1,344 fires and 639,437 acres have been burned due to electrical power and distribution lines (CAL FIRE 2018, 2021). Lightning is the most common cause of nature-induced wildfire (Balch et al. 2017).

An analysis of US Forest Service wildfire data from 1986 to 1996 determined that 95 percent of human-caused wildfires and 90 percent of all wildfires were within 0.5 mile of a road, and that about 61 percent of all wildfires and 55 percent of human-caused wildfires were within approximately 650 feet (200 meters) of a road. The study concluded that the increase in human-caused ignition greatly outweighs the benefits of increased access for firefighters (Pacific Biodiversity Institute 2007).

There are three primary methods of wildfire spread:

- **Embers.** Embers are the most prolific cause of home ignition, at a rate of two out of every three homes destroyed. Embers are glowing or burning pieces of vegetation or construction debris that are lofted during a wildfire and can move up to a mile ahead of a wildfire, especially during high winds. These small embers or sparks may fall on the vegetation near a home (on dry leaves, needles, or twigs on the roof) and subsequently ignite the home. Embers can travel several miles during high wind events, such as the Santa Ana Winds, posing a potential risk to all structures without fire-resistant landscaping and construction within a mile of the fire (CAL FIRE 2019).

- **Direct Flame Contact.** Direct flame contact refers to the transfer of heat by direct flame exposure. Direct contact will heat the building materials of the home, and if the time and intensity of exposure is severe enough, windows will break and materials will ignite.

- **Radiant Heat.** A house can catch fire from the heat that is transferred to it from nearby burning objects, even in the absence of direct flames or embers. By creating defensible space around homes, the risk from radiant heat is significantly reduced.

Secondary Effects of Wildfires

After a high intensity wildfire is suppressed, the burn scar is typically bare of its vegetative cover, which had supported the hillsides and steeper slopes. As a result, rainstorms increase the possibility of severe landslides and debris flows in these areas. The intense heat from the fire can also cause a chemical reaction in the soil that makes it less porous, causing water to run off during precipitation events, which can lead to flooding downstream.

In addition to damaging natural environments, wildfires can injure and cause fatalities of residents and firefighters as well as damage or destroy structures and personal property. Wildfires also deplete water reserves, down power lines, disrupt communication services, and block evacuation routes, which can isolate communities. Wildfires can also indirectly cause flooding if flood control facilities become inadequate to handle increases in stormwater runoff, sediment, and debris that are likely to be generated from burn scars. Regionally, smoke from wildfires creates poor air quality that can last for days or weeks, depending on the scale of the wildfire and wind patterns.

Wildfire in Moorpark

The geography, weather patterns, and vegetation in Moorpark and surrounding areas provide ideal conditions for recurring wildfires. As recent wildfire activity revealed, several areas of Moorpark face some level of

threat from wildland fire. As shown in Figure 5.20-1, *Very High Fire Hazard Severity Zones,* very high FHSZs are located throughout the city, including north of Poindexter Avenue and Princeton Avenue, east of and surrounding State Route (SR) 23, and south and west of Tierra Rejada Road.

Figure 5.20-2, *Wildland-Urban Interface,* shows the WUI areas in Moorpark. WUI areas occur when urban development is intermixed with wildland vegetation, or when pockets of wildland vegetation occur inside developed areas. The WUI is subdivided into the intermix zone (where houses and wildland vegetation directly mingle), the interface zone (housing adjacent to wildland vegetation, but not mingled with it), and the influence zone (areas of wildfire-susceptible vegetation surrounding the other zones). The interface and intermix zones carry the highest risk for wildfires affecting developed areas. Unlike wildfire in wildland areas, fires in WUI areas are more likely to damage or destroy buildings and infrastructure that support populations, the economy, and key services in the city. Some of the WUI areas in Moorpark have few access roads, which poses challenges for evacuation and for emergency responders to fight fires and help residents in these areas.

Wildfire History

CAL FIRE maintains a list of historic fires throughout the state. According to CAL FIRE, Moorpark has experienced several wildfires in and near the city limits, and in the wildland urban interface. Table 5.20-1, *Historic Wildfires in and Surrounding Moorpark,* lists historic wildfire incidents that have occurred within and surrounding the city from 1946 to 2019. Figure 5.20-3, *Historic Fires Within or Near Moorpark by Acres Burned,* shows the historic wildfire perimeters for all fires that have burned in and surrounding Moorpark between 1880 and 2021. The largest fire in recent years was the Simi Fire in 2003.

Table 5.20-1 Historic Wildfires in and Surrounding Moorpark

Year	Fire Name	Size (Acres)
1946	Wiley Canyon	21,266
1953	Shields Lease	11,775
1958	Calumet Canyon	17,213
1984	Grimes Fire	11,304
1985	Peach Hill	1,991
2001	Walnut Incident	36
2003	Simi Fire	107,560
2006	Shekell	13,618
2009	Guiberson	11,775
2011	Collins	58
2015	Princeton	44
2018	Collins	6
2019	Easy Fire	1,806

Source: CAL FIRE 2020.

Factors Influencing Wildfire

Several factors influence wildfire conditions and facilitate the spread of wildfires, including topography, fuels, weather conditions, and climate change. Human actions are also the leading cause of wildfires in California, increasing the risk of wildfire devastating natural lands and communities. This section describes five factors in the context of Moorpark.

Weather

The climate in Moorpark is generally referred to as "Mediterranean," with hot, dry summers and cool, wet winters. Warm summers and cold winters with rainfall are common in the city. Rainfall typically occurs during the winter months due to storm fronts that move inland from the Pacific Ocean or south from the Sierra Nevada. The city receives an average of approximately 15 inches of precipitation annually (Cal-Adapt 2022a). Because the summer months are generally hot and dry, the risk of wildfires has historically been greatest in summer and fall. Relative humidity is also an important fire-related weather factor. As humidity levels drop, the dry air causes vegetation moisture levels to decrease, thereby increasing the likelihood that plant material will readily ignite and burn; the risk of wildfire increases when lightning strikes occur during dry periods.

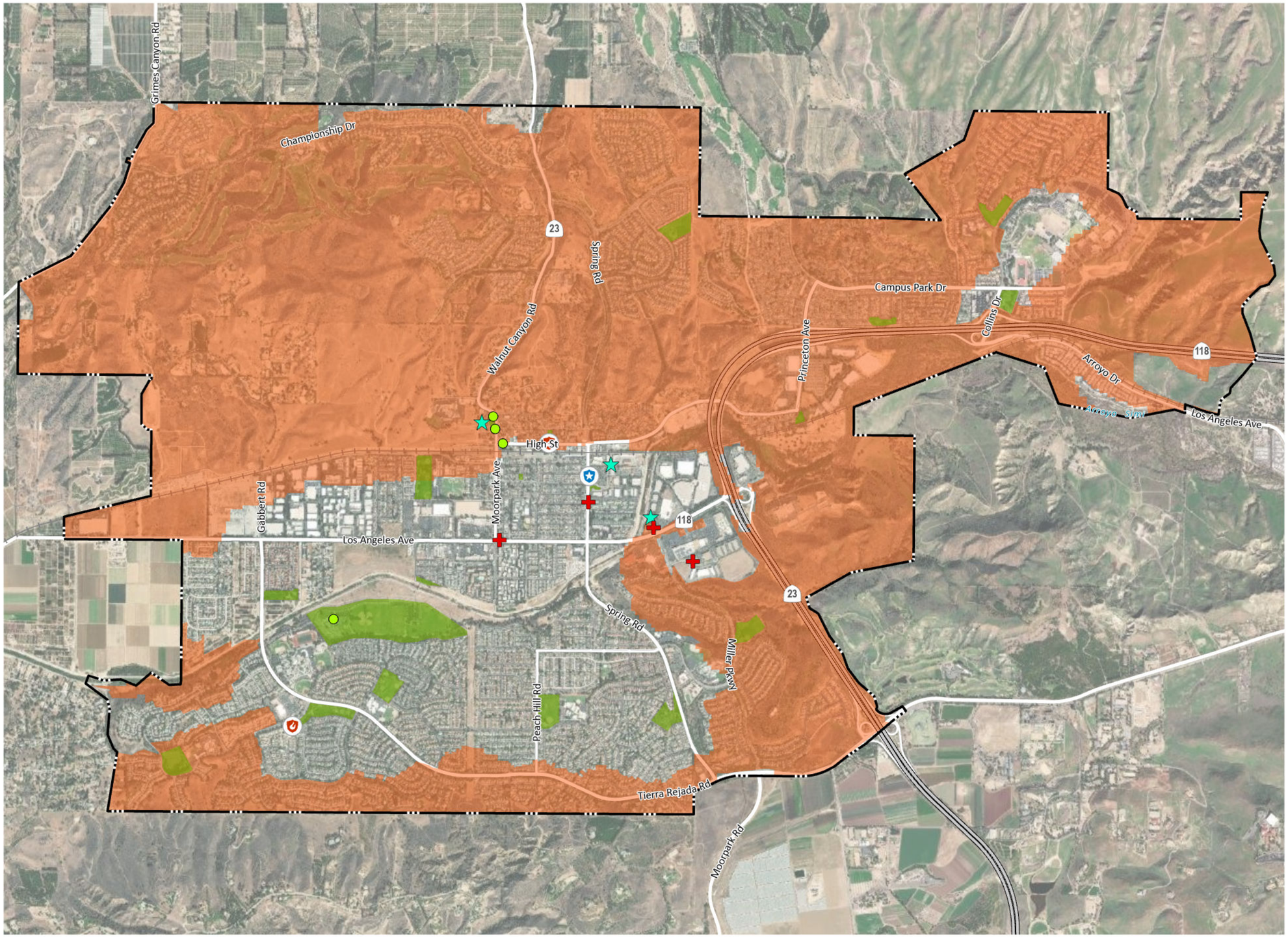
Wind is a primary weather factor of wildfire behavior. Santa Ana winds are warm easterly winds that flow from the Great Basin through the desert and through the passes of the coastal mountains. These winds have reported speeds of up to 80 miles per hour with sustained wind speeds of 40 miles per hour (Ventura County 2022). As wind speeds increase, the rates of fire spread, intensity, and ember spread potential also increase. Gusty and erratic wind conditions, like those of the Santa Ana winds, can cause a wildfire to spread irregularly, making it difficult to predict its path and effectively deploy fire suppression forces. Winds from the southeast in the fall compound the severity of fire conditions, as does lower relative humidity, creating red-flag conditions. Santa Ana winds are especially dangerous because they are accompanied by low humidity, which can dry out trees and other fuel that may also be weakened by the winds. This can increase wildfire conditions in the area. Wind shifts can also occur suddenly due to temperature changes and interactions with steep slopes or hillsides, causing fires to spread unpredictably. Fall has historically been one of the most dangerous times for wildfire risk, as periods of very high temperatures, low humidity, and strong wind increases cause red flag warnings and extreme fire danger.

Fuel

Many portions of Moorpark are covered by natural vegetation, which provides fuels such as grass, brush, and woodlands for wildfires. Each type of vegetation contributes to fire hazard severity to varying degrees. The qualities of vegetation that directly influence fire risk include fuel type and size, loading, arrangement, chemical composition, and dead and live fuel moisture, which contributes to the flammability characteristics of the vegetation. As described in in Section 5.4, *Biological Resources*, of this Draft EIR, landcover in Moorpark consists primarily of urban areas consisting of residential, office, and commercial uses. Approximately 20 percent of the landcover consists of open space and recreation land uses, which can include native and nonnative vegetation. The dominant nonurban vegetation types include coastal scrub, annual grassland, and mixed chaparral. Grass and brush fuel types react quickly to changes in weather such as low humidity or high wind speeds. Fires in areas covered by this vegetation type can spread quickly in gusty wind conditions.

Figure 5.20-1

Very High Fire Hazard Severity Zones



City Boundary
Very High Fire Hazard Severity Zone
Police Services Center
Fire Station
Community Facility
Government Facility
Medical
Parks

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Source: CalFire, 2020; PlaceWorks, 2022 Date: 11/1/2022

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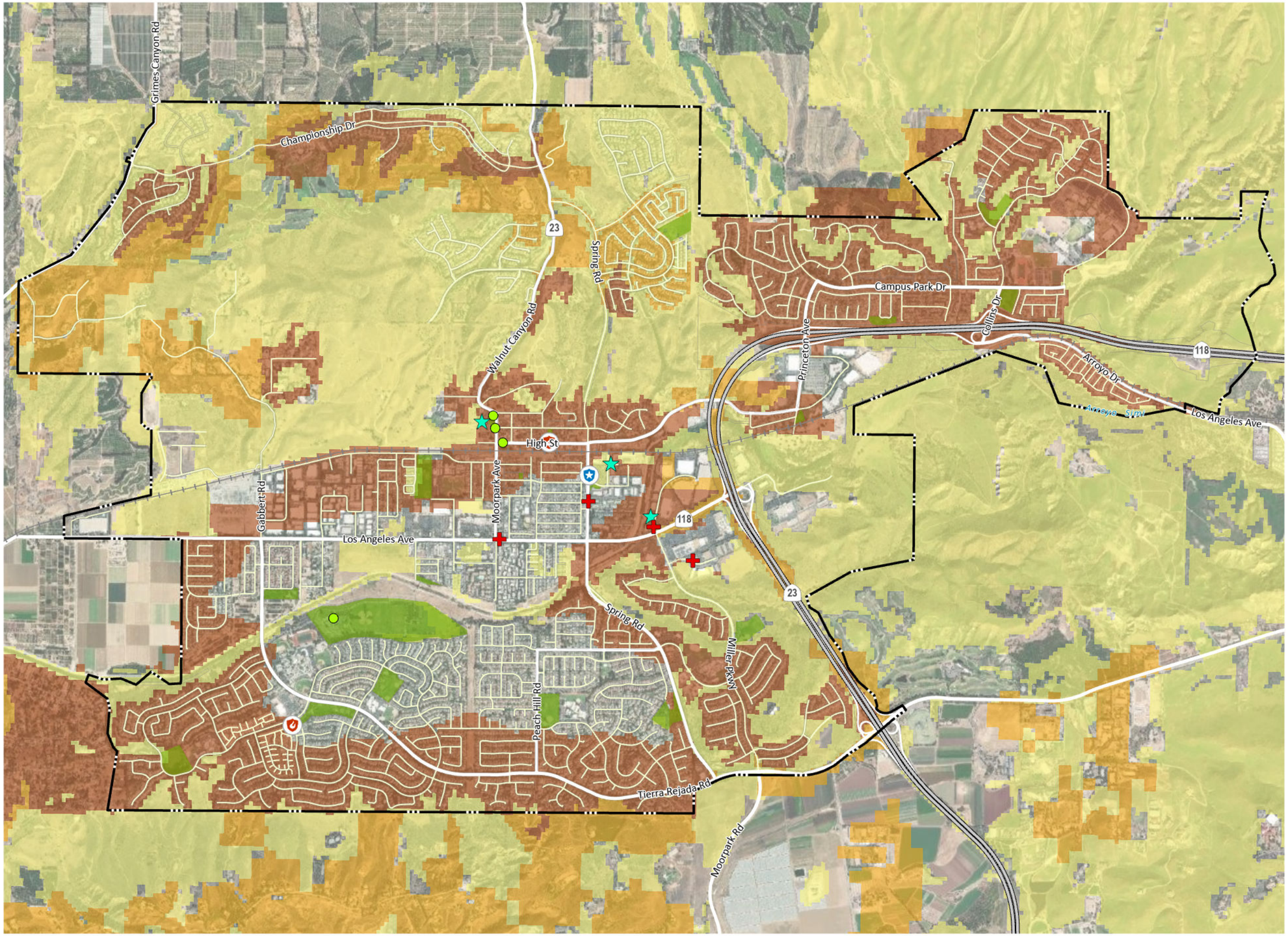
Figure 5.20-2
Wildland Urban Interface



City Boundary
Police Services Center
Fire Station
Community Facility
Government Facility
Medical
Parks

CalFire Wildland/Urban Interface

Influence Zone: Wildfire-susceptible vegetation within 1.5 miles from the interface or intermix zones.

Intermix Zone: Housing development or improved parcels interspersed in an area dominated by wildland vegetation subject to wildfire.

Interface Zone: Dense housing next to vegetation, but not dominated by wildland vegetation, that can burn in a wildfire.

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Source: CalFire, 2020; PlaceWorks, 2022 Date: 11/1/2022

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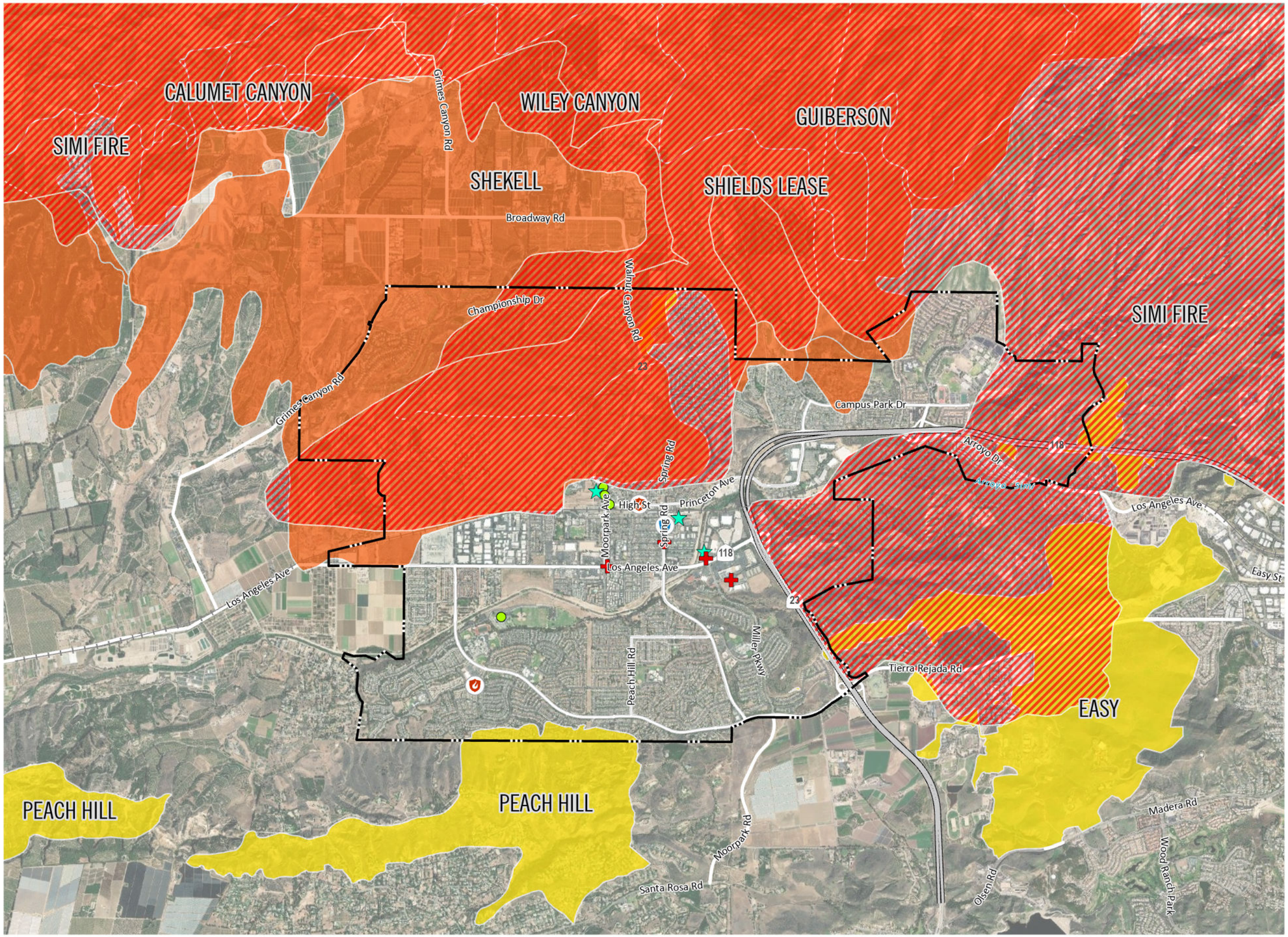
Figure 5.20-3

Historic Fires within or near Moorpark by Acres Burned



City Boundary

Historic Fires by Acres Burned

- 20,000+ acres
- 10,000 to 19,999 acres
- <10,000 acres
- Police Services Center
- Fire Station
- Community Facility
- Government Facility
- Medical

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Source: CalFire, 2020; PlaceWorks, 2022 Date: 11/1/2022

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Topography

Steep terrain or slope plays a key role in the rate and direction in which wildfires spread since fires will normally burn much faster uphill. When the gradient of a slope doubles, the rate of spread of a fire will also likely double. The topography in Moorpark is diverse, with rolling hills, valleys, and ridges that trend from the north to the south. Areas with steep slopes in Moorpark include areas north of the Union Pacific Railroad line and along SR-23 west. These areas would also be more susceptible to debris flow after a fire.

Human Actions

Most wildfires are ignited by human action, the result of direct acts of arson, carelessness, or accidents. Many fires originate in populated areas along roads and around homes and are often the result of the careless disposal of cigarettes, mowing of dead grass, electrical equipment malfunction, use of equipment, or burning of debris. Recreation areas with increased human activity that are in high or very high fire hazard areas also increase the potential for wildfires.

Climate Change

Climate change is likely to increase annual average maximum temperatures in Moorpark from a historical 74.3 degrees Fahrenheit (°F), to 79.5 °F by 2050 and 82.4 °F by 2100 (Cal-Adapt 2022a). This will likely create warmer temperatures earlier and later in the year. Precipitation levels are projected to increase slightly over the course of the century, changing from a historical annual average of 15.3 inches per year to an annual average of 15.5 inches by 2050 and an annual average of 17.4 inches by 2099 (Cal-Adapt 2022a). Variations in precipitation patterns will also lead to an increase in frequency and intensity of heavy precipitation events as well as prolonged periods of drought. The combination of extreme heat and droughts can cause soils and vegetation to dry out, creating more fuel for wildfires. These factors are expected to increase wildfire conditions, creating the risk of more frequent and intense wildfires. Because wildfires burn the trees and other vegetation that help stabilize a hillside and absorb water, more areas burned by fire may also lead to an increase in landslides and floods. Historically, an average of 142 acres burned annually in the city (Cal-Adapt 2022b). Figure 5.20-3 shows historic wildfire perimeters in and near the city. Wildfires are projected to increase to an annual average in the city of 205 acres burned annually by 2050 and decrease to an annual average of 202 acres burned annually by 2100 (Cal-Adapt 2022b).

Fire Protection Resources

Ventura County Fire Department

Fire protection services in Moorpark are provided by the Ventura County Fire Department (VCFD), which provides both firefighting and development review services for the city. VCFD has two fire stations in the Moorpark: Station 40 on Cedar Springs Street and State 42 on East High Street, as shown on Figure 5.15-1, *Community Facilities*, in Section 5.15, *Public Services*. VCFD has a goal of 8.5 minutes for calls in the suburban area and 12 minutes for calls in rural areas, to be achieved 90 percent of the time. In 2017 and 2018, 92 percent of suburban calls for services were responded to within 8.5 minutes, and the rural calls for service were responded to within 12 minutes 90 percent of the time. Section 5.15 provides additional details about fire protection resources and services in Moorpark.

Evacuation and Access

Evacuation routes are designated roadways that allow many people to quickly leave an area due to a potential or imminent disaster. These routes should have sufficient capacity to accommodate the needs of the community, be safely and easily accessible, and allow people to travel far enough away to be safe from emergency conditions.

As shown in Figure 5.20-4, *Evacuation Routes*, primary evacuation routes roads and highways that traverse the city include the following roadways:

- SR-118 (including Los Angeles Avenue)
- SR-23 (including Walnut Canyon Road)
- Tierra Rejada Road
- Peach Hill Road
- Spring Road
- Poindexter Avenue
- Princeton Avenue
- Championship Drive
- Grimes Canyon Road
- Campus Park Drive
- Collins Drive
- Arroyo Drive

During emergencies, the Ventura County Sheriff's Office (on contract as the police service providers for the City) coordinates evacuations warnings and orders. Evacuations are also coordinated through the Ventura County emergency alert program, VC Alert.

In secluded areas of the city, several neighborhoods have evacuation constraints, such as only one road in and out of a neighborhood. Figure 5.20-5, *Evacuation Constrained Residential Parcels*, shows identified evacuation-constrained residential areas throughout the city, many of which are in wildfire hazard zones pursuant to California Government Code Section 65302(g)(5).

5.20.2 Thresholds of Significance

According to Appendix G of the CEQA Guidelines, a project would normally have a significant effect on the environment if it is in or near a State Responsibility Area or land classified as Very High Fire Hazard Severity Zones and would:

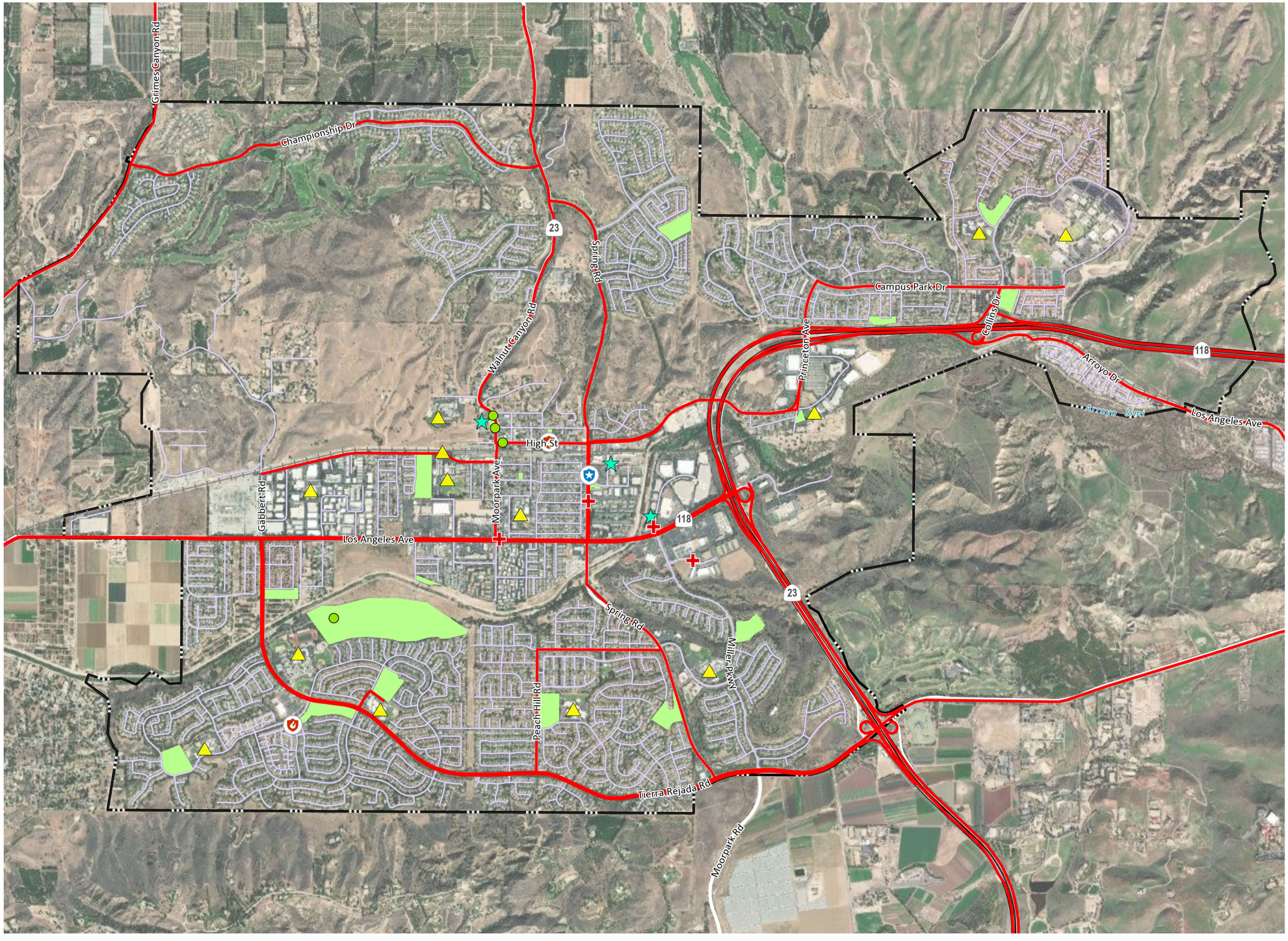
W-1 Substantially impair an adopted emergency response plan or emergency evacuation plan.

W-2 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.

W-3 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.

W-4 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.

Figure 5.20-4
Evacuation Routes



City Boundary
Evacuation Routes
Police Services Center
Fire Station
Community Facility
Government Facility
Medical
School/College Campuses
Parks

MADE BY MOORPARK General Plan 2050

Draft Environmental Impact Report

0 1,000 2,000 4,000 FT

Source: City of Moorpark, 2022; PlaceWorks, 2022

Date: 12/12/2022

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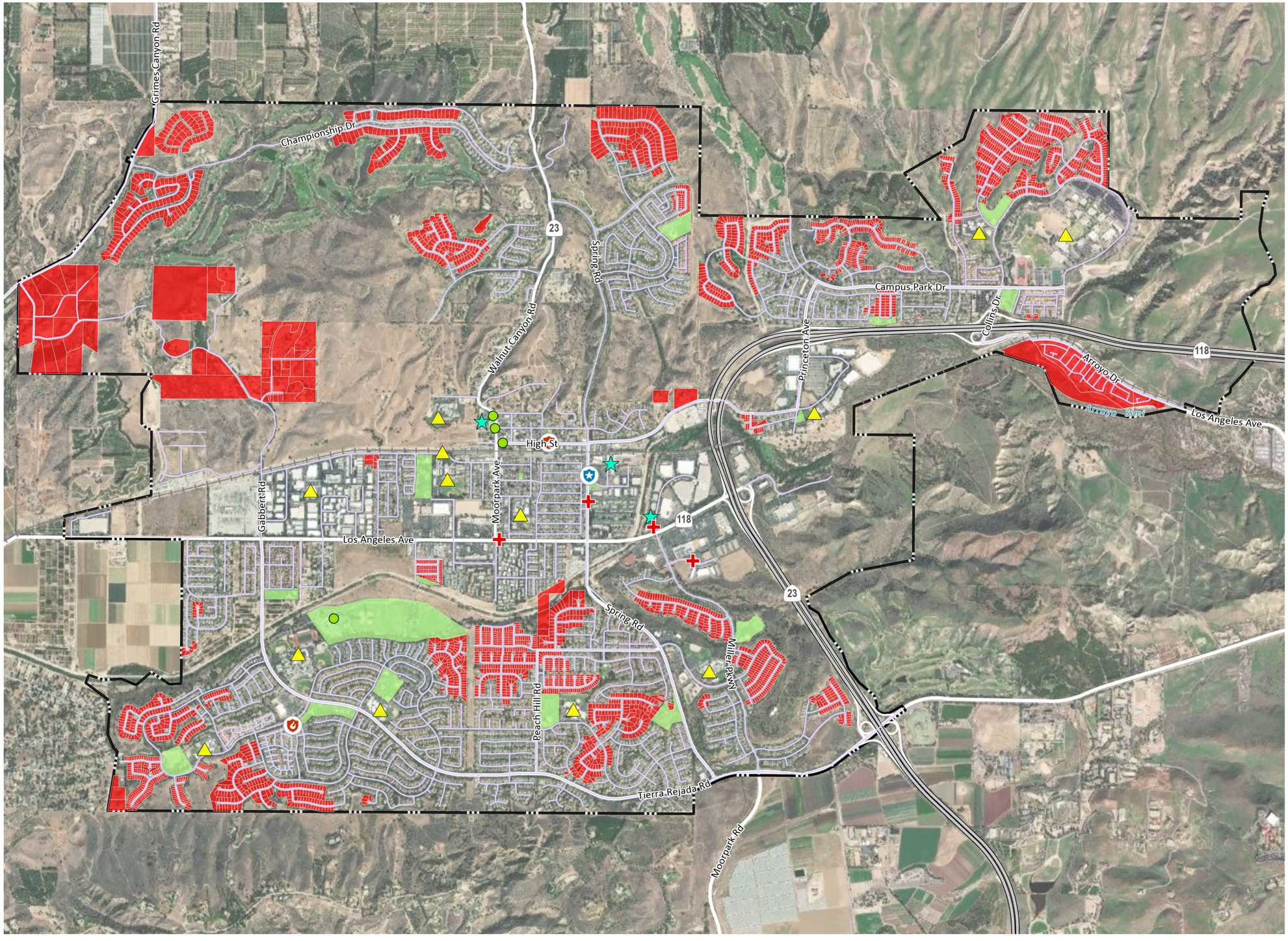
Figure 5.20-5
Evacuation Constrained Residential Parcels



City Boundary
Residential Parcels with Evacuation Constraints
Police Services Center
Fire Station
Community Facility
Government Facility
Medical
School/College Campuses
Parks

MADE BY MOORPARK General Plan 2050

Draft Environmental Impact Report

0 1,000 2,000 4,000 FT

Source: City of Moorpark, 2022; PlaceWorks, 2022; ESRI, 2022

Date: 12/12/2022

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5.20.3 Environmental Impacts

The following impact analysis addresses the thresholds of significance, which are identified in brackets after the impact statement.

Impact 5.20-1: Buildout of the Moorpark General Plan 2050 would not substantially impair an adopted emergency response plan or emergency evacuation plan. [Threshold W-1]

Adopted emergency response plans and emergency evacuation plans include those discussed under Section 5.20.1.1, such as the City of Moorpark Emergency Operations Plan. The proposed project could result in a significant impact if it would substantially impair the implementation of this plan. As discussed in Chapter 3, *Project Description*, of this Draft EIR, the proposed project would increase development potential within the city, including land in very high FHSZs and the WUI.

Buildout under the proposed project may result in substantial changes to the circulation patterns or emergency access routes in the Highlands, Championship, Gabbert, and Hitch Ranch portions of the city. However, any potential development under the proposed project would be required to integrate the Emergency Operations Plan as necessary into development to continue its facilitation in evacuation for the people in wildfire-prone areas. Additionally, future development in the WUI or very high FHSZs would be required to comply with the SRA and Very High Fire Hazard Severity Zone Fire Safe Regulations, the California Building Code, the California Fire Code, and the Moorpark Municipal Code, which have maximum requirements for lengths of single-access roads, minimum widths of roadways, and vegetation fuel management around roadways.

Furthermore, the Safety Element of the Moorpark General Plan 2050 includes several policies and actions to prepare for and facilitate evacuations caused by wildfires and other hazards.

- **Policy SE-3.7 Evacuation routes.** Designate and sign evacuation routes in consideration of the findings of the Risk Vulnerability Assessment.
- **Policy SE-1.4 Emergency alerts.** Work with the Ventura County Office of Emergency Services to provide alerts about potential, developing, and ongoing emergency situations through extensive early-warning and notification systems that convey information to all residents, in multiple languages and formats, to ensure it is widely accessible, including persons with access and functional needs.
- **Policy SE-1.9 Multi-hazard Evacuation Plan.** Identify evacuation routes and develop a multi-hazard evacuation plan, in coordination with surrounding jurisdictions, to ensure evacuation routes remain open and functional during emergencies. Participate in the Ventura County Multi-Jurisdictional Hazard Mitigation Plan.
- **Policy SE-1.10 Ingress and egress.** Require new development to have two ingress and egress routes that account for existing and proposed traffic evacuation volumes at buildout.

- **Policy SE-1.11 Secondary ingress and egress.** Explore secondary means of ingress and egress in areas with evacuation constraints, as shown in Figure 11b, for new subdivisions or developments of 10 units or more.
- **Policy SE-1.12 Evacuation assistance program.** Develop an evacuation assistance program, in coordination with Moorpark City bus, paratransit, and dial-a-ride agencies to help those with limited mobility or lack of access to a vehicle evacuate safely.
- **Policy SE-1.18 Ready Ventura County Program.** Coordinate with the Ventura County Sheriff's Office of Emergency Services to update and coordinate the Ready Ventura County Program as relevant to the City of Moorpark.
- **Policy SE-1.19 Livestock and large animal evacuation.** Work with Ventura County Animal Services and Ventura County Office of Emergency Services to ensure that owners of livestock and large animal are prepared for and have the ability to evacuate during an emergency.
- **Policy SE-4.7 Egress and ingress.** Require new development within a Very High Fire Hazard Severity Zone to have at least two egress and ingress options, visible street signs that identify evacuation routes, and adequate water supply for structural suppression.

Implementation of these policies would increase the effectiveness of the Emergency Operations Plan, and therefore would not impair or conflict with the plan. Furthermore, implementation of Policy SE-1.9, Multi-hazard Evacuation Plan, would encourage the development of a multihazard evacuation plan.

A temporary impact to emergency operations and evacuation under the proposed Moorpark General Plan 2050 could occur from construction of potential future development projects if they were to result in temporary lane closures that would potentially alter evacuation routes. Potential future development in the city would also be required to comply with Very High Fire Hazard Severity Zones Fire Safe Regulations, the California Building Code, the California Fire Code, and the Moorpark Municipal Code. These would be limited to the duration of the construction period, and direct impacts of construction would be evaluated during the permit review process by Moorpark, Ventura County Fire Department, and/or CAL FIRE. Review and approval of temporary lane closures, if needed, for future development project in the city would ensure that that no inconsistencies with emergency evacuation plans would occur.

As discussed in Chapter 3, *Project Description*, future potential development under the proposed project could occur in undeveloped area in very high FHSZs. Future development, regardless of whether it includes new development or redevelopment, is required to comply with adopted local, regional, and State plans and regulations addressing emergency access, response, and evacuation.

Implementation of the Moorpark General Plan 2050 would not substantially impair an adopted emergency response plan or emergency evacuation plan. Thus, this impact is considered less than significant.

Level of Significance Before Mitigation: Less than significant

Impact 5.20-2: Development associated with buildout of the Moorpark General Plan 2030, due to slope, prevailing winds, and other factors, could exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire. [Threshold W-2]

As discussed in Section 5.20.1.2, *Existing Conditions*, Moorpark is prone to Santa Ana winds in early fall through early spring. These winds have high speeds and can shift suddenly, and they are often accompanied by low humidity. They create dangerous conditions for starting and spreading wildfires during the drier months of the year, and they also spread wildfire smoke hazards, as can prevailing winds.

Section 5.20.1.1, *Regulatory Framework*, describes plans, policies, regulations, and procedures that help to reduce wildfire risks. The 2018 Strategic Fire Plan for California, 2021 California Wildfire and Forest Resilience Action Plan, Ventura County MHMP Moorpark Annex, Ventura County Community Wildfire Protection Plan, and Moorpark Emergency Operations Plan are intended to reduce wildfire hazards and coordinate response to these hazards on a statewide and regional scale. In addition, the Ventura County Air Pollution Control District and Ventura County Health Care Agency provide air quality alerts, advisories, and an interactive online map to view current air quality conditions in the region.

Furthermore, the Moorpark General Plan 2050 Safety Element includes Policy SE-1.13, which requires the City to establish a network of equitably located resilience hubs that offer refuge from poor air quality due to regional wildfire smoke.

However, future potential development under the Moorpark General Plan 2050 in the Highlands, Championship, Gabbert, and Hitch Ranch areas could exacerbate wildfire risks by adding people to wildfire-prone areas and exposing people in the city and surrounding jurisdictions to pollutant concentrations from a wildfire. A wildfire combined with Santa Ana winds could expose residents in the city to the uncontrolled spread of wildfire.

As discussed in Section 5.20.1.2, *Existing Conditions*, the topography in wildfire-prone areas of Moorpark is hilly to steep slopes. Construction of potential future development in these areas may require grading and site preparation activities that could change the slope of a single parcel or site. Though some development would occur south of the Union Pacific Railroad where the area is generally flat, development and redevelopment in Moorpark could occur where topography is steeper.

All potential future development in Moorpark would be required to comply with the California Building Standards Code, Very High Fire Hazard Severity Zone Fire Safe Regulations, Moorpark Municipal Code Hillside Management, and grading requirements, which include standards to minimize the ignition and spread of wildfire due to slopes. Additionally, the Moorpark General Plan 2050 includes Fire Hazard Policy SE-4.2, which requires new and existing development to be consistent with the California Building Standards Code, California Fire Code, and California Fire Safe Standards.

Compatibility with Policy SE-2.6 and Policy LU-7.2 requires new development to minimize grading of steep slopes. Wildfire smoke could potentially travel up a slope during a wildfire. Therefore, even with existing regulatory requirements and proposed Safety Element policies and actions, potential future development

under the Moorpark General Plan 2050 could expose people to the uncontrolled spread of wildfire or pollutant concentrations due to slope.

Other factors, such as vegetation, have the potential to exacerbate wildfire risks. The grassland, brush, and woodland areas of Moorpark are easily ignited, especially during late summer and fall when temperatures and winds are high and relative humidity is low. During these conditions, woodland and brush vegetation can dry out, particularly in areas with unirrigated vegetation, becoming extremely flammable and increasing wildfire risks.

As described in Section 5.20.1.1, *Regulatory Framework*, the Ventura County MHMP and Community Wildfire Protection Plan contain several vegetation management, fuel reduction, and fuel break projects to reduce the uncontrolled spread of wildfire due to vegetation. Additionally, all potential future development in wildfire-prone areas in Moorpark would be required to comply with Very High Fire Hazard Severity Zone Fire Safe Regulations, Public Resources Code Section 4291, the California Fire Code, and the Moorpark Municipal Code. These regulations have specific requirements for new and existing development to create defensible space and extensive fuel reduction within 100 feet of a structure, an ember-resistant zone within 5 feet of a structure, and the overall maintenance of properties to reduce the risk of uncontrolled fires or the spread of fires to other properties.

Furthermore, the Moorpark General Plan 2050 contains policies and actions for existing and new projects that integrate with the MHMP, Ventura County Fire Department Strategic Fire Plan, and other State and regional regulations to reduce wildfire risks associated with vegetation.

- **Policy SE-4.1 Fire hazard reduction.** Continue to work with the Ventura County Fire Department and the Ventura Regional Fire Safe Council to implement fire hazard reduction policies and projects, to the extent they are relevant to Moorpark, in the Ventura County Multi-Jurisdictional Hazard Mitigation Plan, the Community Wildfire Protection Plan, the General Plan, and the Capital Improvement Program.

- **Policy SE-4.2 California Building Standards Code and Fire Code.** Continue to adopt and enforce the most recent version of the California Building Standards Code and Fire Code, as well as California Fire Safe Standards for new and existing development.

- **Policy SE-4.3 Sufficient water supplies for fire-fighting.** Ensure that existing and future development in the city has sufficient water supplies nearby for fire-fighting purposes.

- **Policy SE-4.4 Fire safety plans.** New development within Very High Fire Hazard Severity Zones or the Wildland Urban Interface must prepare a fire safety plan for review and approval by the Ventura County Fire Department prior to issuance of building permit.

- **Policy SE-4.5 Ventura County Strategic Fire Plan.** The current version of the Ventura County Fire Department Strategic Fire Plan is hereby incorporated into this Safety Element, by reference, to ensure existing non-conforming development reduces fire hazards by implementing fire safe standards for roads and vegetation.

- **Policy SE-4.6 Vegetation management funding.** Coordinate with the Ventura County Fire Department and Ventura Regional Fire Safe Council to obtain funding for and conduct vegetation and fuel modification or management.

These policies would ensure that fire hazard reduction measures occur and are maintained, and that existing and new development in grassland and chaparral areas would incorporate vegetation management measures. However, even with existing regulatory requirement and proposed Safety Element policies, potential future development under the Moorpark General Plan 2050 could expose people to the uncontrolled spread of wildfire or pollutant concentrations due to factors such as vegetation.

Adherence to the above building practices, fire safety regulations, and vegetation fuel management requirements would reduce the potential for exacerbating wildfire risks. However, due to the programmatic nature of this analysis, the unknown details and potential impacts of specific future potential development projects under the Moorpark General Plan 2050, and the potential for future development to be in wildfire-prone areas, impacts would still be potentially significant.

Level of Significance Before Mitigation: Potentially significant.

Impact 5.20-3: Development associated with the Moorpark General Plan 2050 could 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. [Threshold W-3]

Buildout under the Moorpark General Plan 2050 would require the installation of new roadways, fuel breaks, emergency water sources, transmission lines, and other utilities to serve future potential development in Moorpark.

- **Roadways.** As shown in Figure 5.17-1, *Moorpark Roadway Network*, proposed buildout of the Moorpark General Plan 2050 would include new roadways to connect to new developments throughout the city; many of these developments would be in very high FHSZs. Potential future development under the proposed project could also create new or expanded roadways in fire-prone areas of Moorpark, including converting unpaved roads to paved access roads, developing roadways to new development, and expanding existing roads to accommodate evacuation and multimodal forms of transportation.

- **Fuel Breaks.** Safety Element Policies SE-4.1 and SE-4.6 require coordination with the VCFD and Ventura Regional Fire Safe Council to implement wildfire hazard mitigation projects, such as vegetation and fuel modification and management. These activities would likely occur in very high FHSZs, the WUI, and residential areas.

- **Emergency Water Sources.** Safety Element Policies SE-4.3 and SE-4.6 ensure that existing and future development have sufficient water supplies for fire-fighting purposes and structural suppression, which would require the installation of new water conveyance infrastructure in new development or areas not served by adequate water supplies.

- **Power lines.** Potential future development under the Moorpark General Plan 2050 would require electrical line installations and connections to provide power to buildings and infrastructure. Safety Element Policy SE-5.5 and policies in several other elements require continued collaboration with Southern California Edison to underground electrical transmission infrastructure throughout the city, prioritizing high-voltage transmission lines and areas in very high FHSZs.

- **Other Utilities.** Potential future development under the Moorpark General Plan 2050 in Moorpark would also require the installation and maintenance of water systems, septic or sewer systems, internet infrastructure, and stormwater systems in wildfire-prone areas.

These types of improvements would involve temporary construction and result in changes to the existing built environment. The installation and operation of new above-ground power transmission lines would create a higher risk of wildfire compared to other infrastructure. However, as stated above, the Safety Element encourages the undergrounding of new and existing electrical transmission lines, which is consistent with Moorpark Municipal Code Chapter 12.20, Undergrounding Utilities. Additionally, the California Public Utilities Commission requires maintenance of vegetation around power lines, strict wire-to-wire clearances, annual inspections of above-ground power lines, and preparation of fire prevention plans for above-ground power lines in high-fire-threat districts. These measures would reduce the wildfire risks associated with the installation and maintenance of power lines.

Development in the wildfire-prone areas of eastern Moorpark would also be required to comply with building and design standards in the California Building Code and California Fire Code, which include provisions for fire-resistant building materials, the clearance of debris, and fire safety requirements during demolition and construction activities. Additionally, Public Resources Code Section 4291 requires a defensible space within 100 feet of a structure and an ember-resistant zone within 5 feet of a structure. Furthermore, Very High Fire Hazard Severity Zone Fire Safe Regulations would prevent structures from being within 30 feet of a roadway, reducing the potential for new roadways to exacerbate wildfire risks. These measures, along with policies in the Moorpark General Plan 2050 Safety Element for undergrounding of power lines, creation and maintenance of vegetation, and ensuring adequate water supplies would minimize wildfire risks associated with the installation and maintenance of infrastructure.

Such infrastructure and maintenance activities would also be required to comply with the adopted State regulations, Moorpark Municipal Code standards, and the Moorpark General Plan 2050 policies to mitigate the impact of infrastructure on the environment. Therefore, impacts would be less than significant.

Level of Significance Before Mitigation: Less than significant.

Impact 5.20-4: The proposed project would not expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, postfire slope instability, or drainage changes. [Threshold W-4]

Wildfires, such as the 2003 Simi Fire or the 2019 Easy Fire, can create favorable conditions for other hazards, such as flooding and landslides during the rainy season. Wildfires on hillsides can burn the vegetation that stabilizes the slope and create hydrophobic conditions that prevent the ground from absorbing water. This

can lead to landslides, debris flows, and flooding. A project would result in a significant impact if—due to slopes, drainage patterns, or postfire slope instability—it would expose people or structures to significant risks from landsides, debris flows, or flooding.

As discussed in Chapter 5.10, *Hydrology and Water Quality*, parts of Moorpark are in the 100-year and 500-year floodplains. As shown in Figure 5.10-5, *Flood Zones,* in Section 5.10, *Hydrology and Water Quality*, floodplains are primarily along Arroyo Simi and Arroyo Las Posas as well as low-lying areas scattered throughout the city.

As discussed in Chapter 5.7, *Geology and Soils*, slopes in the northern part of the city are in areas with high landslide susceptibility and coincide with very high FHSZs. These areas are considered prone to earthquake-caused landslides and susceptible to landslides from precipitation and other causes. This overlap may cause areas outside of a flood hazard or landslide-susceptible zone to be affected by runoff, postfire slope instability, or drainages changes following a wildfire.

Potential future development under the Moorpark General Plan 2050 could contribute to postfire slope instability or drainage changes upstream. However, proposed Safety Element Policy SE-2.2 requires the preparation of geologic studies for new development in geologic hazard zones; Policy SE-2.5 requires new development to comply with current state, regional, and local requirements for geologic safety; and Policy SE-2.6 requires that a slope stability analysis be conducted for new development in hillside areas in compliance with the Moorpark Municipal Code Section 17.38, Hillside Management. Proposed Safety Element Policy SE-3.6 requires new development in flood hazard zones to comply with the Moorpark Municipal Code Section 15.24, Floodplain Management, and Policy SE-3.8 requires new development in designated floodplains to submit flood safety plans for approval by the Floodplain Administrator. Furthermore, all new development in the city is required to comply with State and local regulations, such as the California Building Code and Moorpark Municipal Code, both of which have provisions to reduce flooding and landslides in existing and new development. For example, Section 1803 of the 2019 California Building Code requires a geotechnical investigation that must assess existing landslide susceptibility on a project site. As described in Section 5.20.1.1, the Moorpark Municipal Code Section 17.38, Hillside Management, and Section 15.24, Floodplain Management, provide regulations for existing and new development to reduce landslide and flooding potential downslope or downstream.

Furthermore, the Moorpark General Plan 2050 Safety Element contains the following policies and actions to minimize runoff and prevent flooding:

- **Policy SE-2.1 California Building Standards Code.** Continue to implement California Building Standards Code seismic safety standards for construction of new buildings.
- **Policy SE-3.2 Low impact development.** Minimize impervious areas by requiring development to include low impact development and green infrastructure that increase pervious surfaces to absorb impacts from stormwater and flooding.
- **Policy SE-3.3 Floodway management.** Consider floodway management design that includes areas where stream courses are left natural or as developed open space.

- **Policy SE-3.4 Flood control infrastructure.** Coordinate with the Ventura County Public Works Agency to improve and maintain flood control structures, detention basins, channel reconstruction, and diversion systems within Moorpark and the greater Calleguas Creek watershed, using natural infrastructure where feasible.

- **Policy SE-3.5 Critical and lifeline facilities.** Maintain the structural and operational integrity of critical and lifeline facilities during and after flooding events.

- **Policy SE-3.7 Review of new flood control facilities.** Coordinate with the Ventura County Public Works Agency to review new development for flood control and flood hazard reduction from new development.

- **Policy SE-3.9 Green infrastructure.** Promote the use of green infrastructure to convey stormwater and reduce flooding.

New development complying with these policies of the Moorpark General Plan 2050 would not expose people or structures to downslope landslides or downstream flooding due to postfire hazards. Furthermore, as identified in Impact 5.20-1 and Impact 5.20-2, development under Moorpark General Plan 2050 must also comply with best management practices regarding wildfire prevention, action, and recovery as outlined in the Moorpark Emergency Operations Plan, Ventura County MHMP Moorpark Annex, and the Ventura County Community Wildfire Protection Plan. All future development, regardless of the location, is required to comply with adopted local, regional, and State plans and regulations addressing wildfire prevention, which would minimize risks of postfire hazards. Compliance with these policies and regulatory requirements would ensure that impacts from postfire instability would be less than significant.

Level of Significance Before Mitigation: Less than significant.

5.20.4 Relevant General Plan Policies

The following are relevant policies of the Moorpark General Plan 2050, which may contribute to reducing potential wildfire impacts as a result of implementation of the proposed project.

Land Use Element

- **Policy LU-4.9 Development fit with natural terrain.** Decrease the overall density and intensity of development as the slope of the natural terrain increases.

- **Policy LU-7.2 Design development to respect natural setting.** Require that new development respect, integrate with, and complement the natural features of the land including conforming building massing to topographic forms, restricting grading of steep slopes and encouraging the preservation of ridgelines and significant hillsides as prominent visual features.

- **Policy LU-7.3 Protect uses from hazards.** Require that new development be located and designed to avoid or mitigate any potentially hazardous conditions.

- **Policy LU-8.9 Design to avoid hazards.** Require that development in significant hazard areas is located and designed to ensure safety in accordance with the Safety Element.
- **Policy LU-17.6 Utility undergrounding.** Encourage the undergrounding of utilities in conjunction with development projects where feasible.

Circulation Element

- **Policy CI-3.4 Hillside areas.** Require that new collector streets in hillside areas incorporate curbs, gutters, and graded shoulders, and prohibit on-street parking except where pull-outs may be incorporated that do not affect safe access to residents and for fire equipment.
- **Policy CI-3.5 Private streets.** Require that private streets be improved to public street standards prior to dedication to the City.
- **Policy CI-3.7 Evacuation routes.** Designate and sign evacuation routes in consideration of the findings of the Risk Vulnerability Assessment.
- **Policy CI-13.3 Utility Undergrounding.** Continue to pursue undergrounding of overhead utility lines, and support maintenance and replacement programs to reduce wildfire hazards.

Open Space, Parks, and Recreation Element

- **Policy OSPR-4.5 Underground utilities.** Coordinate with SCE and local utilities to underground existing above-ground utility lines where feasible.
- **Policy OSPR-6.1 Limitations on development.** Maintain open space lands for health and safety by limiting development in areas susceptible to flood, seismic risk, geologic instability, and wildfire, as detailed in the Safety Element.

Safety Element

- **Policy SE-1.3 Emergency coordination.** Coordinate with Ventura County, neighboring cities, and non-governmental partners to effectively prepare for and respond to hazards and natural disasters.
- **Policy SE-1.4 Emergency alerts.** Work with the Ventura County Office of Emergency Services to provide alerts about potential, developing, and ongoing emergency situations through extensive early-warning and notification systems that convey information to all residents, in multiple languages and formats, to ensure it is widely accessible, including persons with access and functional needs.
- **Policy SE-1.5 Hazard Mitigation Plan.** Incorporate the most recent version of the Ventura County Hazard Mitigation Plan, Moorpark Annex, most recently certified by FEMA in 2022, into this Safety Element by reference, as permitted by California Government Code Section 65302.6.

- **Policy SE-1.9 Multi-Hazard Evacuation Plan.** Identify evacuation routes and develop a multi-hazard evacuation plan, in coordination with surrounding jurisdictions, to ensure evacuation routes remain open and functional during emergencies. Participate in the Ventura County Multi-Jurisdictional Hazard Mitigation Plan.

- **Policy SE-1.10 Ingress and egress.** Require new development to have two ingress and egress routes that account for existing and proposed traffic evacuation volumes at buildout.

- **Policy SE-1.11 Secondary ingress and egress.** Explore secondary means of ingress and egress in areas with evacuation constraints, as shown in Figure 11b, for new subdivisions or developments of 10 units or more.

- **Policy SE-1.12 Evacuation assistance program.** Develop an evacuation assistance program, in coordination with Moorpark City bus, paratransit, and dial-a-ride agencies to help those with limited mobility or lack of access to a vehicle evacuate safely.

- **Policy SE-1.14 Resilient critical and lifeline facility siting.** Locate new critical and lifeline facilities outside of flood and dam inundation zones, very high fire hazard severity zones, and landslide susceptibility areas, when feasible. If not feasible, appropriately site, design, and construct new critical facilities to be resilient to flooding, fires, and landslides.

- **Policy SE-1.17 Accessible hazard preparedness education and outreach.** Promote hazard preparedness with education and outreach available in multiple languages and formats appropriate for people with access and functional needs.

- **Policy SE-1.18 Ready Ventura County Program.** Coordinate with the Ventura County Sheriff's Office of Emergency Services to update and coordinate the Ready Ventura County Program as relevant to the City of Moorpark.

- **Policy SE-1.19 Livestock and large animal evacuation.** Work with Ventura County Animal Services and Ventura County Office of Emergency Services to ensure that owners of livestock and large animal are prepared for and have the ability to evacuate during an emergency.

- **Policy SE-2.1 California Building Standards Code.** Continue to implement California Building Standards Code seismic safety standards for construction of new buildings.

- **Policy SE-2.2 Geologic studies.** Require the preparation of detailed geologic studies for new development within seismic and geologic hazard zones.

- **Policy 2.5 New development.** Require new development to comply with current state, regional, and local requirements for seismic and geologic safety.

- **Policy SE-2.6 Slope stability analysis.** Require that slope stability analyses be conducted for new development in hillside areas and compliance with Section 17.38, Hillside Management, of the Moorpark Municipal Code.
- **Policy SE-3.2 Low impact development.** Minimize impervious areas by requiring development to include low impact development and green infrastructure that increase pervious surfaces to absorb impacts from stormwater and flooding.
- **Policy SE-3.3 Floodway management.** Consider floodway management design that includes areas where stream courses are left natural or as developed open space.
- **Policy SE-3.4 Flood control infrastructure.** Coordinate with the Ventura County Public Works Agency to improve and maintain flood control structures, detention basins, channel reconstruction, and diversion systems within Moorpark and the greater Calleguas Creek watershed, using natural infrastructure where feasible.
- **Policy SE-3.5 Critical and lifeline facilities.** Maintain the structural and operational integrity of critical and lifeline facilities during and after flooding events.
- **Policy SE-3.6 Floodplain management requirements.** Require new development in the 100-year and/or 500-year flood hazard zones to comply with provision Moorpark Municipal Code Section 15.24, Floodplain Management.
- **Policy SE-3.7 Review of new flood control facilities.** Coordinate with the Ventura County Public Works Agency to review new development for flood control and flood hazard reduction from new development.
- **Policy SE-3.8 Flood safety plans.** Require new development within a designated floodplain to submit, flood safety plan for approval by the Floodplain Administrator.
- **Policy SE-3.9 Green infrastructure.** Promote the use of green infrastructure to convey stormwater and reduce flooding.
- **Policy SE-4.1 Fire hazard reduction.** Continue to work with the Ventura County Fire Department and the Ventura Regional Fire Safe Council to implement fire hazard reduction policies and projects, to the extent they are relevant to Moorpark, in the Ventura County Multi-Jurisdictional Hazard Mitigation Plan, the Community Wildfire Protection Plan, the General Plan, and the Capital Improvement Program.
- **Policy SE-4.2 California Building Standards Code and Fire Code.** Continue to adopt and enforce the most recent version of the California Building Standards Code and Fire Code, as well as California Fire Safe Standards for new and existing development.
- **Policy SE-4.3 Sufficient water supplies for fire-fighting.** Ensure that existing and future development in the city has sufficient water supplies nearby for fire-fighting purposes.

- **Policy SE-4.4 Fire safety plans.** New development within Very High Fire Hazard Severity Zones or the Wildland Urban Interface must prepare a fire safety plan for review and approval by the Ventura County Fire Department prior to issuance of building permit.
- **Policy SE-4.5 Ventura County Strategic Fire Plan.** The current version of the Ventura County Fire Department Strategic Fire Plan is hereby incorporated into this Safety Element, by reference, to ensure existing non-conforming development reduces fire hazards by implementing fire safe standards for roads and vegetation.
- **Policy SE-4.6 Vegetation management funding.** Coordinate with the Ventura County Fire Department and Ventura Regional Fire Safe Council to obtain funding for and conduct vegetation and fuel modification or management.
- **Policy SE-4.7 Egress and ingress.** Require new development within a Very High Fire Hazard Severity Zone to have at least two egress and ingress options, visible street signs that identify evacuation routes, and adequate water supply for structural suppression.
- **Policy SE-4.8 Traffic Control Plans.** Require development projects in the Very High Fire Hazard Severity Zone or WUI to prepare a Traffic Control Plan to ensure that construction equipment or activities do not block roadways during the construction period.
- **Policy SE-5.4 Undergrounding electric utilities.** Continue to collaborate with Southern California Edison to underground electrical transmission infrastructure throughout the City, prioritizing high voltage transmission lines and areas within Very High Fire Hazard Severity Zones.
- **Policy SE-9.1 Fire safety services.** Work with the Ventura County Fire Department to provide fire prevention, protection, and emergency preparedness services that adequately protect residents, employees, visitors, and structures from fire and fire-related emergencies.
- **Policy SE-9.2 Staffing and equipment.** Coordinate with Ventura County Fire Department to ensure adequate staffing and equipment for fire protection services throughout the City to quickly respond to emergencies.
- **Policy SE-9.3 Fair share extension.** Require new development to fund a fair share extension of fire services to maintain service standards, including personnel and capital improvements costs.

5.20.5 Level of Significance Before Mitigation

Upon implementation of regulatory requirements and standard conditions of approval, some impacts would be less than significant: 5.20-1, 5.20-3, and 5.20-4.

Without mitigation, one impact would be **potentially significant**:

- **Impact 5.20-2** Development under the Moorpark General Plan 2050 would increase population, buildings, and infrastructure in wildfire-prone areas, thereby exacerbating wildfire risks.

5.20.6 Mitigation Measures

Impact 5.20-2

Policies identified in the Moorpark General Plan 2050 provide the best wildfire hazard reduction measures available. However, the only way to fully avoid the wildfire impact from implementation is to not allow development in areas in very high FHSZs and the WUI. The majority of Moorpark is in a very high FHSZ and/or the WUI. Prohibiting new development in Moorpark is not feasible or practical because the City has a responsibility to meet other, conflicting obligations, including increasing the number and type of housing available. Therefore, this type of measure is considered and rejected. There are no feasible mitigation measures.

5.20.7 Level of Significance After Mitigation

Impact 5.20-2

Implementation of the proposed Moorpark General Plan 2050 could increase population, buildings, and infrastructure in wildfire prone areas. Though Moorpark General Plan 2050 policies and mandatory State wildfire hazard reduction measures reduce risks in wildfire-prone areas, impacts related to exacerbating the risk of pollutant concentrations from wildfire and the uncontrolled spread of wildfire would be reduced, but not to a less-than-significant level.

The Moorpark General Plan 2050 contains policies that require existing development, new, and redevelopment projects to create and maintain fire safe vegetation around structures and roadways, enforcement of fire-safe standards, and creation of fuel breaks. New development would also be required to prepare Fire Safety Plans. These policies provide the best wildfire hazard reduction measures available. However, the only way to fully avoid the wildfire impact is to not allow development in very high FHSZs or the WUI. Due to potential unknown impacts from future development under the Moorpark General Plan 2050, impacts at the programmatic level would remain **significant and unavoidable**. This conclusion does not preclude a finding of less-than-significant impacts at the project level.

5.20.8 References

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6. Significant Unavoidable Adverse Impacts

At the end of Chapter 1, *Executive Summary*, is a table that summarizes the impacts, mitigation measures, and levels of significance before and after mitigation. Mitigation measures would reduce the level of impact, but the following impacts would remain significant, unavoidable, and adverse after mitigation measures are applied.

Agricultural Resources

- **Impact 5.2-1.** Implementation of the Moorpark General Plan 2050 would convert 462.1 acres of Farmland to nonagricultural use. While mitigation measures were considered, they would not fully mitigate the direct loss of farmlands associated with the implementation of the proposed project because there would still be a net reduction in the total amount of land suitable for agricultural use. Consequently, the associated loss of agricultural production under Impact 5.2-1 would be a significant and unavoidable impact.

Air Quality

- **Impact 5.3-1.** The proposed project would be inconsistent with the Ventura County's air quality management plan because buildout under the Moorpark General Plan 2050 would cumulatively contribute to the nonattainment designations of the South Central Coast Air Basin (SCCAB). Incorporation of Mitigation Measures AQ-1 and AQ-2 into future development projects would reduce operation-phase criteria air pollutant emissions associated with buildout of the Moorpark General Plan 2050. Additionally, goals and policies in the General Plan would promote increased capacity for alternate transportation modes. Nevertheless, Impact 5.3-1 would remain significant and unavoidable.

- **Impact 5.3-2.** Buildout in accordance with the proposed project would generate short-term emissions that would exceed Ventura County Air Pollution Control District's (APCD) regional significance thresholds and cumulatively contribute to the nonattainment designations of the SCCAB. Mitigation Measure AQ-1 and the goals and policies of the Moorpark General Plan 2050 would reduce construction-related air pollutant emissions to the extent feasible. However, individual projects accommodated under the proposed project might exceed the Ventura County APCD's regional significance thresholds. Therefore, construction-related regional air quality impacts of developments that would be accommodated by the proposed project would remain significant and unavoidable.

- **Impact 5.3-3.** Buildout in accordance with the proposed project would generate long-term emissions that would exceed Ventura County APCD's regional significance thresholds and cumulatively contribute to the nonattainment designations of the SCCAB. Mitigation Measure AQ-2, in addition to the goals and policies of the proposed project, would reduce air pollutant emissions to the extent feasible. The measures and policies covering topics such as expansion of the pedestrian and bicycle networks,

promotion of public and active transit, and support to increase building energy efficiency and energy conservation would also reduce criteria air pollutants in the city. Further, as shown in Table 5.3-11, *City of Moorpark Criteria Air Pollutant Emissions Forecast Compared to Existing Conditions*, compared to existing baseline year conditions, emissions of NOx are projected to decrease from current levels despite growth associated with the Moorpark General Plan 2050. However, Impact 5.3-3 would remain significant and unavoidable due to the increase in VOCs associated with the proposed project from consumer product use by residential development.

- **Impact 5.3-4.** Buildout of the Moorpark General Plan 2050 could expose sensitive receptors to substantial concentrations of toxic air contaminants (TAC). Buildout could result in new sources of criteria air pollutant emissions and/or TACs near existing or planned sensitive receptors. Review of development projects by Ventura County APCD for permitted sources of air toxics (e.g., industrial facilities, dry cleaners, and gasoline dispensing facilities) would ensure that health risks are minimized. Additionally, Mitigation Measure AQ-3 would ensure mobile sources of TACs not covered under Ventura County APCD permits are considered during subsequent project-level environmental review by the City of Moorpark. Individual development projects would be required to achieve the incremental risk thresholds established by Ventura County APCD, and TACs would be less than significant. However, implementation of the Moorpark General Plan 2050 would generate TACs that could contribute to elevated levels in the air basin. While individual projects would achieve the project-level risk threshold of 10 per million, they would nonetheless contribute to the higher levels of risk in Ventura County as a whole. Therefore, the Moorpark General Plan 2050's cumulative contribution to health risk is significant and unavoidable.

Biological Resources

- **Impact 5.4-2.** Growth accommodated through long-term buildout of the city would result in significant loss of habitat. The California and federal Endangered Species Acts regulate the loss of habitat as it pertains to special status plant and animal species. Coordination with the US Fish and Wildlife Service and California Department of Fish and Wildlife would ensure that, on a project-by-project basis, habitat is replaced or conserved in accordance with the agency-determined ratios if special status plant and animal species occur or are likely to occur on-site, which will be determined through consultation. Implementation of Mitigation Measures BIO-1 through BIO-4 and implementation of the Moorpark Highlands Habitat Conservation Plan (HCP) would mitigate project-specific impacts to biological resources in Moorpark to less-than-significant levels. However, in the absence of a multiple species HCP for Ventura County, the cumulative loss of habitat and sensitive species from buildout of the Moorpark General Plan 2050 in Ventura County is considered significant and unavoidable.

Cultural Resources

- **Impact 5.5-1.** Policies in the Moorpark General Plan 2050 as well as Mitigation Measures CUL-1 through CUL-4 would reduce potential impacts associated with historic resources. However, if a proposed project would result in the demolition or significant alteration of a historical resource, it cannot be mitigated to a less than significant level. As a result, impacts on historic resources as a result of future

development in accordance with the proposed Moorpark General Plan 2050 are significant and unavoidable.

Greenhouse Gas Emissions

- **Impact 5.8-1.** Implementation of the Moorpark General Plan 2050 Conservation Element Policy COS-8.2 would ensure that the city cooperates with regional partners to develop and implement prepares a Climate Action Plan to achieve the GHG reduction goals of SB 32 and chart a trajectory to achieve the long-term GHG reduction goal set by Assembly Bill 1279 and substantial progress toward the State's carbon neutrality goals for year 2045. However, given the growth in population and employment in the city and the magnitude of emissions reductions needed to achieve the GHG reduction target, it is uncertain whether Conservation Element Policy COS-8.2 would lower GHG emissions to less-than-significant levels. Therefore, GHG emissions are considered significant and unavoidable.

Hazards and Hazardous Materials

- **Impact 5.9-5.** Implementation of the proposed Moorpark General Plan 2050 could increase population, buildings, and infrastructure in wildfire-prone areas. Though Moorpark General Plan 2050 policies and mandatory State wildfire hazard reduction measures reduce risks in wildfire-prone areas, impacts related to exacerbating the risk of pollutant concentrations from wildfire and the uncontrolled spread of wildfire would be reduced, but not to a less-than-significant level. The Moorpark General Plan 2050 contains policies that require existing development, new, and redevelopment projects to create and maintain fire-safe vegetation around structures and roadways, enforce fire-safe standards, and create fuel breaks. New development would also be required to prepare fire safety plans. These policies provide the best wildfire hazard reduction measures available. However, the only way to fully avoid the wildfire impact is to not allow development in areas within very high fire hazard severity zones and the wildland-urban interface. This conclusion does not prevent a finding of less-than-significant impacts at the project level; however, due to potential unknown impacts from future development under the Moorpark General Plan 2050, impacts at the programmatic level would remain significant and unavoidable.

Noise

- **Impact 5.13-1.** Implementation of Mitigation Measure N-1 would reduce potential noise impacts during construction to the extent feasible. However, due to the potential for proximity of construction activities to sensitive uses, the number of construction projects occurring simultaneously, and the potential duration of construction activities, Impact 5.13-1 (construction noise) could result in a temporary substantial increase in noise levels above ambient conditions. Therefore, impacts would remain significant and unavoidable. It should be noted that the identification of this program-level impact does not preclude the finding of less-than-significant impacts for subsequent projects analyzed at the project level.

- **Impact 5.13-2.** As demonstrated in Section 5.13.6, *Mitigation Measures*, under "Impact 5.13-2," there are no feasible or practical mitigation measures available to reduce project-generated traffic noise to less-than-significant levels for existing residences along the affected roadway. No individual measure and no set of feasible or practical mitigation measures are available to reduce project-generated traffic noise to

less-than-significant levels in all cases. Thus, traffic noise would remain a significant and unavoidable impact. It should be noted that the identification of this program-level impact does not preclude the finding of less-than-significant impacts for subsequent projects analyzed at the project level.

Wildfire

- **Impact 5.20-2.** Implementation of the proposed Moorpark General Plan 2050 could increase population, buildings, and infrastructure in wildfire prone areas. Though Moorpark General Plan 2050 policies and mandatory State wildfire hazard reduction measures reduce risks in wildfire-prone areas, impacts related to exacerbating the risk of pollutant concentrations from wildfire and the uncontrolled spread of wildfire would be reduced but not to a less-than-significant level. The Moorpark General Plan 2050 contains policies that require existing development, new, and redevelopment projects to create and maintain fire-safe vegetation around structures and roadways, enforce fire-safe standards, and create fuel breaks. New development would also be required to prepare fire safety plans. These policies provide the best wildfire hazard reduction measures available. However, the only way to fully avoid the wildfire impact is to not allow development in areas within very high fire hazard severity zones and the wildland-urban interface. This conclusion does not prevent a finding of less-than-significant impacts at the project level; however, due to potential unknown impacts from future development under the Moorpark General Plan 2050, impacts at the programmatic level would remain significant and unavoidable.

7. Alternatives to the Proposed Project

7.1 INTRODUCTION

7.1.1 Purpose and Scope

The California Environmental Quality Act (CEQA) requires that an environmental impact report (EIR) include a discussion of reasonable project alternatives that would "feasibly attain most of the basic objectives of the project, but would avoid or substantially lessen any significant effects of the project, and evaluate the comparative merits of the alternatives" (CEQA Guidelines Section 15126.6[a]). As required by CEQA, this chapter identifies and evaluates potential alternatives to the proposed project.

Section 15126.6 of the CEQA Guidelines explains the foundation and legal requirements for the alternatives analysis in an EIR. Key provisions are:

- "[T]he discussion of alternatives shall focus on alternatives to the project or its location which are capable of avoiding or substantially lessening any significant effects of the project, even if these alternatives would impede to some degree the attainment of the project objectives, or would be more costly." (15126.6[b])
- "The specific alternative of 'no project' shall also be evaluated along with its impact." (15126.6[e][1])
- "The no project analysis shall discuss the existing conditions at the time the notice of preparation is published, or if no notice of preparation is published, at the time environmental analysis is commenced, as well as what would be reasonably expected to occur in the foreseeable future if the project were not approved, based on current plans and consistent with available infrastructure and community services. If the environmentally superior alternative is the 'no project' alternative, the EIR shall also identify an environmentally superior alternative among the other alternatives." (15126.6[e][2])
- "The range of alternatives required in an EIR is governed by a 'rule of reason' that requires the EIR to set forth only those alternatives necessary to permit a reasoned choice. The alternatives shall be limited to ones that would avoid or substantially lessen any of the significant effects of the project." (15126.6[f])
- "Among the factors that may be taken into account when addressing the feasibility of alternatives are site suitability, economic viability, availability of infrastructure, general plan consistency, other plans or regulatory limitations, jurisdictional boundaries…, and whether the proponent can reasonably acquire, control or otherwise have access to the alternative site (or the site is already owned by the proponent)" (15126.6[f][1]).
- "Only locations that would avoid or substantially lessen any of the significant effects of the project need be considered for inclusion in the EIR." (15126.6[f][2][A])

- "An EIR need not consider an alternative whose effect cannot be reasonably ascertained and whose implementation is remote and speculative." (15126.6[f][3])

For each development alternative, this analysis:

- Describes the alterative.
- Analyzes the impact of the alternative as compared to the proposed project.
- Identifies the impacts of the project that would be avoided or lessened by the alternative.
- Assesses whether the alternative would meet most of the basic project objectives.
- Evaluates the comparative merits of the alternative and the project.

According to Section 15126.6(d) of the CEQA Guidelines, "[i]f an alternative would cause…significant effects in addition those that would be caused by the project as proposed, the significant effects of the alternative shall be discussed, but in less detail than the significant effects of the project as proposed."

7.1.2 Project Objectives

As described in Section 3.2, the following objectives have been established for the proposed project and will aid decision makers in their review of the project, the project alternatives, and associated environmental impacts.

1. Sustainable growth through well-planned development that provides for the needs of Moorpark's residents and businesses, makes efficient use of land and infrastructure, protects important environmental resources, promotes the health of the community, and maintains the unique character distinguishing the City as a special place in the region.

2. A city of distinct, compact, and walkable centers and corridors, surrounded by diverse and complete neighborhoods, and connected to a unifying network of greenways and open spaces.

3. Fair and equitable access for all residents to employment, housing, parks, education, recreation, transportation, retail, and public services, including participation in governmental decision-making.

4. Well-designed housing that is diverse in product type, occupancy, location, affordability, and tenure and that meets the existing and future needs of residents.

5. Vital, active, prosperous, and well-designed commercial centers and corridors that offer a diversity of goods, services, and entertainment and contribute a positive experience for Moorpark's residents and visitors.

6. A diversity of well-designed districts and corridors containing an integrated mix of commercial, office, and/or housing that enable Moorpark's residents to live close to businesses and employment, reduce automobile use, and actively engage and enhance pedestrian activity.

7. A transportation system supporting uses accommodated by the Land Use Plan and providing for the safe and efficient movement of people of all ages and abilities, goods, and services into, out of, and through the City of Moorpark.

8. A citywide system of safe, efficient, and attractive bicycle, pedestrian and multi-use trail routes for commuter, school, and recreational use.

9. Transportation systems and utility infrastructure that supports Moorpark's neighborhoods and business districts, are efficient, and employ best practices for environmental sustainability and carbon reduction.

10. A self-sustaining, innovative, and resilient local economy that provides goods and services desired by local residents, promotes growth in living-wage jobs and access to lifelong learning, attracts regional consumer spending, and contributes to Moorpark's premier quality of life.

11. Protection of scenic topographic features and elements that contribute to Moorpark's unique aesthetic and visual qualities and promote the quality of life that Moorpark citizens pursue.

7.1.3 Significant Impacts of the Project

The following significant and unavoidable impacts are identified in Chapter 5, *Environmental Analysis*, of this Draft EIR (DEIR):

Agricultural Resources

- **Impact 5.2-1.** Implementation of the Moorpark General Plan 2050 would convert 462.1 acres of Farmland to nonagricultural use. While mitigation measures were considered, they would not fully mitigate the direct loss of farmlands associated with the implementation of the proposed project because there would still be a net reduction in the total amount of land suitable for agricultural use. Consequently, the associated loss of agricultural production under Impact 5.2-1 would be a significant and unavoidable impact.

Air Quality

- **Impact 5.3-1.** The proposed project would be inconsistent with the Ventura County's air quality management plan (AQMP) because buildout under the Moorpark General Plan 2050 would cumulatively contribute to the nonattainment designations of the South Central Coast Air Basin (SCCAB). Incorporation of Mitigation Measures AQ 1 and AQ-2 into future development projects would reduce operation-phase criteria air pollutant emissions associated with buildout of the Moorpark General Plan 2050. Additionally, goals and policies in the General Plan would promote increased capacity for alternate transportation modes. Nevertheless, Impact 5.3-1 would remain significant and unavoidable.

- **Impact 5.3-2.** Buildout in accordance with the proposed project would generate short-term emissions that would exceed Ventura County Air Pollution Control District's (APCD) regional significance thresholds and cumulatively contribute to the nonattainment designations of the SCCAB. Mitigation Measure AQ-1 and the goals and policies of the Moorpark General Plan 2050 would reduce construction-related air pollutant emissions to the extent feasible. However, individual projects accommodated under the proposed project

might exceed the Ventura County APCD's regional significance thresholds. Therefore, construction-related regional air quality impacts of developments that would be accommodated by the proposed project would remain significant and unavoidable.

- **Impact 5.3-3.** Buildout in accordance with the proposed project would generate long-term emissions that would exceed Ventura County APCD's regional significance thresholds and cumulatively contribute to the nonattainment designations of the SCCAB. Mitigation Measure AQ-2, in addition to the goals and policies of the proposed project, would reduce air pollutant emissions to the extent feasible. The measures and policies covering topics such as expansion of the pedestrian and bicycle networks, promotion of public and active transit, and support to increase building energy efficiency and energy conservation would also reduce criteria air pollutants in the city. Further, as shown in Table 5.3-11, *City of Moorpark Criteria Air Pollutant Emissions Forecast Compared to Existing Conditions*, compared to existing baseline year conditions, emissions of NOx are projected to decrease from current levels despite growth associated with the Moorpark General Plan 2050. However, Impact 5.3-3 would remain significant and unavoidable due to the increase in VOCs associated with the proposed project from consumer product use by residential development.

- **Impact 5.3-4.** Buildout of the Moorpark General Plan 2050 could expose sensitive receptors to substantial concentrations of toxic air contaminants (TAC). Buildout could result in new sources of criteria air pollutant emissions and/or TACs near existing or planned sensitive receptors. Review of development projects by Ventura County APCD for permitted sources of air toxics (e.g., industrial facilities, dry cleaners, and gasoline dispensing facilities) would ensure that health risks are minimized. Additionally, Mitigation Measure AQ-3 would ensure mobile sources of TACs not covered under Ventura County APCD permits are considered during subsequent project-level environmental review by the City of Moorpark. Individual development projects would be required to achieve the incremental risk thresholds established by Ventura County APCD, and TACs would be less than significant. However, implementation of the Moorpark General Plan 2050 would generate TACs that could contribute to elevated levels in the air basin. While individual projects would achieve the project-level risk threshold of 10 per million, they would nonetheless contribute to the higher levels of risk in Ventura County as a whole. Therefore, the Moorpark General Plan 2050's cumulative contribution to health risk is significant and unavoidable.

Biological Resources

- **Impact 5.4-2.** Growth accommodated through long-term buildout of the city would result in significant loss of habitat. The California and federal Endangered Species Acts regulate the loss of habitat as it pertains to special status plant and animal species. Coordination with the US Fish and Wildlife Service and California Department of Fish and Wildlife would ensure that, on a project-by-project basis, habitat is replaced or conserved in accordance with the agency-determined ratios if special status plant and animal species occur or are likely to occur on-site, which will be determined through consultation. Implementation of Mitigation Measures BIO-1 through BIO-4 and implementation of the Moorpark Highlands Habitat Conservation Plan (HCP) would mitigate project-specific impacts to biological resources in Moorpark to less-than-significant levels. However, in the absence of a multiple species HCP for Ventura County, the cumulative

loss of habitat and sensitive species from buildout of the Moorpark General Plan 2050 in Ventura County is considered significant and unavoidable

Cultural Resources

- **Impact 5.5-1.** Policies in the Moorpark General Plan 2050 as well as Mitigation Measures CUL-1 through CUL-4 would reduce potential impacts associated with historic resources. However, if a proposed project would result in the demolition or significant alteration of a historical resource, it cannot be mitigated to a less than significant level. As a result, impacts on historic resources as a result of future development in accordance with the proposed Moorpark General Plan 2050 are significant and unavoidable.

Greenhouse Gas Emissions

- **Impact 5.8-1.** Implementation of the Moorpark General Plan 2050 Conservation Element Policy COS-8.2 would ensure that the city cooperates with regional partners to develop and implement a Climate Action Plan to achieve the GHG reduction goals of SB 32 and chart a trajectory to achieve the long-term GHG reduction goal set by Assembly Bill 1279 and substantial progress toward the State's carbon neutrality goals for year 2045. However, given the growth in population and employment in the city and the magnitude of emissions reductions needed to achieve the GHG reduction target, it is uncertain whether Conservation Element Policy COS-8.2 would lower GHG emissions to less-than-significant levels. Therefore, GHG emissions are considered significant and unavoidable.

Hazards and Hazardous Materials

- **Impact 5.9-5.** Implementation of the proposed Moorpark General Plan 2050 could increase population, buildings, and infrastructure in wildfire-prone areas. Though Moorpark General Plan 2050 policies and mandatory State wildfire hazard reduction measures reduce risks in wildfire-prone areas, impacts related to exacerbating the risk of pollutant concentrations from wildfire and the uncontrolled spread of wildfire would be reduced, but not to a less-than-significant level. The Moorpark General Plan 2050 contains policies that require existing development, new, and redevelopment projects to create and maintain fire-safe vegetation around structures and roadways, enforce fire-safe standards, and create fuel breaks. New development would also be required to prepare fire safety plans. These policies provide the best wildfire hazard reduction measures available. However, the only way to fully avoid the wildfire impact is to not allow development in areas within very high fire hazard severity zones (FHSZ) and the wildland-urban interface (WUI). This conclusion does not prevent a finding of less-than-significant impacts at the project level; however, due to potential unknown impacts from future development under the Moorpark General Plan 2050, impacts at the programmatic level would remain significant and unavoidable.

Noise

- **Impact 5.13-1.** Implementation of Mitigation Measure N-1 would reduce potential noise impacts during construction to the extent feasible. However, due to the potential for proximity of construction activities to sensitive uses, the number of construction projects occurring simultaneously, and the potential duration of construction activities, Impact 5.13-1 (construction noise) could result in a temporary substantial

increase in noise levels above ambient conditions. Therefore, impacts would remain significant and unavoidable. It should be noted that the identification of this program-level impact does not preclude the finding of less-than-significant impacts for subsequent projects analyzed at the project level.

- **Impact 5.13-2.** As demonstrated in Section 5.13.6, *Mitigation Measures*, under "Impact 5.13-2," there are no feasible or practical mitigation measures available to reduce project-generated traffic noise to less-than-significant levels for existing residences along the affected roadway. No individual measure and no set of feasible or practical mitigation measures are available to reduce project-generated traffic noise to less-than-significant levels in all cases. Thus, traffic noise would remain a significant and unavoidable impact. It should be noted that the identification of this program-level impact does not preclude the finding of less-than-significant impacts for subsequent projects analyzed at the project level.

Wildfire

- **Impact 5.20-2.** Implementation of the proposed Moorpark General Plan 2050 could increase population, buildings, and infrastructure in wildfire prone areas. Though Moorpark General Plan 2050 policies and mandatory State wildfire hazard reduction measures reduce risks in wildfire-prone areas, impacts related to exacerbating the risk of pollutant concentrations from wildfire and the uncontrolled spread of wildfire would be reduced but not to a less-than-significant level. The Moorpark General Plan 2050 contains policies that require existing development, new, and redevelopment projects to create and maintain fire-safe vegetation around structures and roadways, enforce fire-safe standards, and create fuel breaks. New development would also be required to prepare fire safety plans. These policies provide the best wildfire hazard reduction measures available. However, the only way to fully avoid the wildfire impact is to not allow development in areas within very high FHSZs and the WUI. This conclusion does not prevent a finding of less-than-significant impacts at the project level; however, due to potential unknown impacts from future development under the Moorpark General Plan 2050, impacts at the programmatic level would remain significant and unavoidable.

7.2 ALTERNATIVES CONSIDERED AND REJECTED DURING THE SCOPING/PROJECT PLANNING PROCESS

Alternatives to the proposed project were evaluated based on their ability to reduce potentially significant impacts of the proposed project and their potential to attain most of the project's basic objectives. The following is a discussion on the land use alternatives considered during the scoping and planning process and the reasons why they were not selected for detailed analysis in this DEIR.

7.2.1 Alternative Development Areas

CEQA requires that the discussion of alternatives focus on alternatives to the project or its location that are capable of avoiding or substantially lessening any significant effects of the project. The key question and first step in the analysis is whether any of the significant effects of the project would be avoided or substantially lessened by putting the project in another location. Only locations that would avoid or substantially lessen any of the significant effects of the project need be considered for inclusion in the EIR (CEQA Guidelines

Section 15126[5][B][1]). The proposed project is the Moorpark General Plan 2050. The City does not have authority to carry out functions pursuant to its General Plan, including regulating land uses, outside of the city boundaries. Therefore, an alternative development area would be infeasible and was not analyzed.

7.3 ALTERNATIVES SELECTED FOR FURTHER ANALYSIS

Based on the criteria listed above, the following three alternatives have been determined to represent a reasonable range of alternatives with the potential to feasibly attain most of the basic objectives of the project but which may avoid or substantially lessen any of the significant effects of the project. These alternatives are analyzed in detail in the following sections.

- No Project/Current General Plan Alternative
- Increased Density Land Use Alternative
- Reduced Industrial Land Use Alternative

An EIR must identify an "environmentally superior" alternative, and where the No Project Alternative is identified as environmentally superior, the EIR is then required to identify as environmentally superior an alternative from among the others evaluated. Each alternative's environmental impacts are compared to the proposed project and determined to be environmentally superior, neutral, or inferior. Section 7.7 identifies the Environmentally Superior Alternative. The preferred land use alternative (proposed project) is analyzed in detail in Chapter 5 of this DEIR.

7.3.1 Alternatives Comparison

The following statistical analysis provides a summary of general socioeconomic buildout projections determined by the four land use alternatives, including the proposed project. It is important to note that these are not growth projections. That is, they do not anticipate what is likely to occur by a certain time horizon, but provide a buildout scenario that would only occur if all the areas of the city were to develop to the probable capacities yielded by the land use alternatives. The following statistics were developed as a tool to better understand the differences between the alternatives. Table 7-1, *Buildout Statistical Summary*, identifies citywide information regarding dwelling unit, population, and employment projections for each of the alternatives.

Table 7-1 Buildout Statistical Summary

	Existing Conditions	Proposed Project	No Project/Current General Plan Alternative	Increased Density Land Use Alternative[2]	Reduced Industrial Land Use Alternative
Dwelling Units	11,537	17,025	14,351	17,025	18,722
Population[1]	36,445	53,781	45,335	53,781	60,472
Non-Residential Square Feet	8,783,171	13,567,083	11,053,808	13,567,083	10,487,463
Employment	12,915	20,249	16,917	20,249	15,837
Jobs-Housing Ratio	1.12	1.19	1.18	1.19	0.84

[1] Population is calculated by multiplying households by a persons per household rate of 3.23, a blended rate which accounts for the City's mix of single and multi-unit housing.
[2] This alternative has the same number of dwelling units; however, there would be a reduction of 292 single-family residential units and increase of 292 multifamily residential units compared to the proposed project

7.4 NO PROJECT/CURRENT GENERAL PLAN ALTERNATIVE

In the No Project/Current General Plan Alternative, the Moorpark General Plan 2050 would not be implemented and the current General Plan would remain in effect. Buildout statistics for Moorpark General Plan 2050 and the current General Plan are compared in Table 7-1. In addition, this alternative would not include the updates to the Land Use Element; Circulation Element; Housing Element; Economic Development Element; Open Space, Parks, and Recreation Element; Conservation Element; Safety Element; Noise Element; or Implementation Plan.

7.4.1 Aesthetics

In this alternative, the city would be developed under the existing land use plan and would involve new development and redevelopment in the same areas as the proposed Moorpark General Plan 2050. The City's municipal code identifies development standards to ensure quality development in the city. The aesthetic impacts would be similar to the proposed project and would be less than significant.

7.4.2 Agriculture and Forestry Resources

In this alternative, the city would be developed under the existing land use plan and would involve new development and redevelopment in similar areas as the proposed Moorpark General Plan 2050. Similar to the proposed project, this alternative would convert Unique Farmland and Local Farmland to nonagricultural land uses. Likewise, under the current General Plan, 15.5 acres are designated for agricultural uses, which is the same as the proposed project. Neither the proposed project nor this alternative would conflict with existing zoning for agriculture. Therefore, under this alternative, impacts to farmland would be the same as the proposed project and would remain significant.

There are no land use designations or zoning for forest land, timberland, or timberland zoned Timberland Production in Moorpark. Therefore, impacts on forestry resources would be similar to the proposed project and would remain no impact.

7.4.3 Air Quality

Similar to buildout of the proposed project, this alternative would result in an increase in emissions in the city that have the potential to exceed the Ventura County APCD's significance thresholds. Therefore, like the proposed project, implementation of this alternative would result in significant impacts regarding consistency with the AQMP, cumulatively considerable net increase of pollutants for which the project region is in nonattainment, and exposing sensitive receptors to substantial pollutant concentrations. However, unlike the proposed project, this alternative would not result in an update to the City's General Plan, which includes updated policies that have the potential to reduce air quality emissions. In comparison to the proposed project, this alternative would have similar impacts, and impacts would remain significant.

7.4.4 Biological Impacts

This alternative would be within the same footprint as the proposed project; therefore, under this alternative, biological resource impacts would be the same as the proposed project. A number of special status plant species and special status wildlife species are known to occur in or immediately adjacent to the city or are known to occur in the region based on historical data. Federal and state regulations require development projects to assess and mitigate potential biological resources within a project site. Similar to the proposed project, the current General Plan would increase development and could result in loss of habitat. Mitigation measures identified for the project would be applicable to this alternative. However, unlike the proposed project, this alternative would not update the City's General Plan, which includes updated policies with the potential to reduce conflicts with wildlife corridors. Impacts on biological resources would be the same as the proposed Moorpark General Plan 2050 and would remain significant for cumulative habitat loss.

7.4.5 Cultural Resources

Cultural resource impacts are primarily associated with potential ground disturbance and development of previously undisturbed areas, or impacts to potential historic structures (building additions, demolition, etc.). This alternative would be within the same footprint as the proposed project; therefore, impacts to cultural resources would be similar to the proposed project. Mitigation measures for the proposed project would be applicable to this alternative and would mitigate potential impacts to archeological resources. However, like the proposed project, this alternative would have the potential to impact historic buildings as a result of redevelopment. Therefore, impacts to potential cultural resources would be the same as the proposed project and would remain significant.

7.4.6 Energy

Similar to buildout of the proposed project, this alternative would result in an increase in energy use. However, the proposed project would include goals and policies that have the potential to reduce energy use in the city.

In general, impacts to energy use under this alternative would be similar to the proposed project, and would be less than significant.

7.4.7 Geology and Soils

As with the proposed project, individual development projects under this alternative would be required to prepare site-specific geotechnical investigations to evaluate seismic, liquefaction, ground settlement, paleontological resources, and/or soil expansion hazards. All development projects would be required to comply with existing federal, state, and local regulations, such as the California Building Code and statewide Construction General Permit. Therefore, impacts would be the same as proposed project, and would be less than significant.

7.4.8 Greenhouse Gas Emissions

Similar to buildout of the proposed project, this alternative would result in an increase in GHG emissions in the city. Local GHG emissions reduction measures are necessary to align the city with the GHG reduction targets of the state. This alternative would not include the proposed project's goals and policies, which includes policies to reduce GHG emissions through better coordinated land use and transportation and policies to reduce energy use and increase energy efficiency. Overall, impacts of this alternative would be similar compared to the proposed project and would remain significant.

7.4.9 Hazards and Hazardous Materials

In both this alternative and the proposed project, land uses throughout the city would be required to comply with existing federal, state, and local regulations governing use, storage, transport, and disposal of hazardous materials and hazardous wastes. Structures built in very high FHSZs would be required to comply with building standards in the California Building Code and the California Fire Code. However, under this alternative, the new policies that would reduce potential hazards would not be implemented. This alternative would result in similar impacts compared to the proposed project, and impacts would remain significant for wildfire hazards.

7.4.10 Hydrology and Water Quality

This alternative would have the same hydrology and water quality impacts as the proposed project. Future project-specific water quality management plans (WQMPs), preliminary and/or final, will be prepared consistent with the prevailing terms and conditions of the City Local Implementation Plan, and Model WQMP at the time of project application. Moreover, Low Impact Development and water quality treatment solutions prescribed in project-specific WQMPs shall be designed to support or enhance the regional best management practices (BMP) and efforts implemented by the City as part of its efforts to improve water quality. During construction, project-specific Stormwater Pollution Prevention Plans (SWPPP) are required to be prepared in accordance with the site-specific sediment risk analyses based on the grading plans. The SWPPP must describe construction BMPs that address pollutant source reduction and provide measures/controls necessary to mitigate potential pollutant sources. Therefore, impacts would be similar and remain less than significant.

7.4.11 Land Use and Planning

This alternative would leave the current General Plan in place rather than providing an update. Neither this alternative nor the proposed project would divide an established community. However, the current General Plan is not consistent with new or updated state and local planning laws, such as the California Complete Streets Act of 2008 and the Southern California Association of Governments' 2020–2045 Regional Transportation Plan/Sustainable Communities Strategies (RTP/SCS) (Connect SoCal). The Complete Streets Act of 2008 requires that cities plan for a multimodal transportation network that serves motorized and nonmotorized modes of transportation, and Connect SoCal encourages three principles that collectively work as the key to the region's future—mobility, economy, and sustainability. Goals and policies in the proposed project address the need to establish an interconnected network of bicycle and pedestrian infrastructure that is safe, efficient, and accessible. Comprehensive transit services related to mobility, connectivity, and safety are also addressed. Therefore, the land use impacts would be slightly increased under this alternative in comparison to the proposed project, but like the proposed project, would be less than significant.

7.4.12 Mineral Resources

The proposed project and this alternative would result in similar impacts to mineral resources. Moorpark does not contain mineral resources of statewide, regional, or local significance. The city is primarily underlain by mineral resource zones (MRZ) MRZ-1, MRZ-3, and MRZ-4. Overall, the impact to mineral resources would be similar to the proposed project and remain no impact.

7.4.13 Noise

Construction and operational noise impacts would be the similar to the proposed project under this alternative. Like the proposed project, construction activities under this alternative could occur close to sensitive receptors and impacts would be significant. This alternative would generate a similar number of trips and development patterns as the proposed project. Therefore, mitigation measures for the proposed project would be applicable to this alternative and would reduce potential impacts. However, noise impacts would be the same under this alternative in comparison to the proposed project, and would be significant.

7.4.14 Population and Housing

This alternative would result in smaller numbers of dwelling units, population, and employment than the proposed project. However, the jobs-housing ratio in the city would be similar to that of the proposed project. Therefore, population and housing impacts of this alternative would be the same as proposed project and would remain less than significant.

7.4.15 Public Services

This alternative would result in less population and employment than the proposed project. Impacts to public services, including fire, police, school, and library services, would be reduced under this alternative. However, impacts would remain less than significant.

7.4.16 Recreation

This alternative would result in a reduced population compared to the proposed project; therefore, this alternative would result in a reduction in demand on recreation and recreational services in the city. However, under this alternative, policies pertaining to trails, parks, and open space would not be implemented. This alternative would have a reduction in impacts to recreation because it would reduce demand for parkland in the city. Like the proposed project, impacts would be less than significant.

7.4.17 Transportation

This alternative would result in a reduction in population and employment in the city compared to the proposed project. Vehicle miles traveled (VMT) per service population would be slightly higher than for the proposed project, but there would continue to be a reduction in the citywide average VMT per service population. Additionally, goals and policies in the proposed project address the need to establish an interconnected network of bicycle and pedestrian infrastructure that is safe, efficient, and accessible, as well as comprehensive transit services related to mobility, connectivity, and safety to reduce VMT. However, overall impacts would be similar to the proposed project and would remain less than significant.

7.4.18 Tribal Cultural Resources

Impacts to tribal cultural resources would primarily be associated with potential ground disturbance and development of previously undisturbed areas. Impacts to potential tribal cultural resources would be similar to the proposed project. Mitigation measures for the protection of tribal cultural resources would be applicable to this alternative. Additionally, both the proposed project and this alternative would comply with federal and state regulations pertaining to the protection and preservation tribal cultural resources. Therefore, impacts to potential tribal cultural resources would be similar and less than significant.

7.4.19 Utilities and Service Systems

Impacts on public utilities (sewer, water, stormwater, solid waste) would be slightly reduced compared to the proposed project because this alternative has less population and employment growth, reducing the demand to expand infrastructure in the city. However, individual projects would be subject to City and agency permits, fees, and applications to ensure that these projects would not pose burdens on the existing infrastructure. Therefore, impacts would remain less than significant.

7.4.20 Wildfire

Under this alternative, development in the very high FHSZ and WUI would still occur. However, under this alternative, policies and goals in the Moorpark General Plan 2050 aimed at reducing wildfire impacts would no longer be included. Overall, impacts associated with wildfire hazards would be similar to the proposed project and would remain significant.

7.4.21 Conclusion

Ability to Reduce Environmental Impacts

Impacts of the No Project/Current General Plan alternative would be similar for aesthetics, agriculture and forestry resources, air quality, biological resources, cultural resources, energy, geology and soils, GHG emissions, hazards and hazardous materials, hydrology and water quality, mineral resources, noise, population and housing, transportation, tribal cultural resources, and wildfire. Impacts would be greater for land use and planning. Impacts would be reduced for public services, recreation, and utilities and service systems.

Ability to Achieve Project Objectives

The No Project/Current General Plan Alternative would meet all of the project objectives; however, this alternative would not implement the proposed Moorpark General Plan 2050 policies, which are designed to further enhance the project objectives compared to the current General Plan.

7.5 INCREASED DENSITY LAND USE ALTERNATIVE

The increased density land use alternative would result in an increase in 292 multifamily residential units and a decrease in 292 single-family residential units (see Table 7-2, *Change in Dwelling Units Under Increased Density Land Use Alternative*). The multifamily residential land uses would increase near the city center in the more developed areas within the city, but would be outside the very high FHSZs. The reduction in single-family residential land use would occur in the outer portions of the city nearby open space designated areas.

Table 7-2 Change in Dwelling Units Under Increased Density Land Use Alternative

Proposed Land Uses	New Dwelling Units Under Moorpark General Plan 2050	New Dwelling Units Under Increased Density Land Use Alternative[1]	Difference[1]
Single Family Residential	+1,459	+1,167	-292
Multifamily Residential	+4,030	+4,322	+292
Nonresidential	+4,783,912	+4,783,912	0

[1] Assumes 20 percent of the new Single Family Residential units were replaced with Multifamily Residential Units.

7.5.1 Aesthetics

In this alternative, the entire City would be developed with an increased land use intensity and higher densities as the proposed Moorpark General Plan 2050. However, the City's municipal code identifies development standards to ensure quality development in the city, and under the alternative the city would retain more open space, which could allow less development along local scenic corridors. Therefore, aesthetic impacts would be similar to the proposed project and would be less than significant.

7.5.2 Agriculture and Forestry Resources

This alternative is similar to the proposed project because the entire city would continue be developed; however, this alternative would allow for preservation of more open space as a result of an increased land use intensity and higher densities near the city center. As a result, there would still be a loss in Unique Farmland and Local Farmland under this alternative. Mitigation measures identified in the Moorpark General Plan 2050 would still apply and under this alternative, and impacts to farmland would be similar to the proposed project and would remain significant.

There are no land use designations or zoning for forest land, timberland, or timberland zoned Timberland Production in Moorpark. Therefore, impacts on forestry resources would be similar to the proposed project and would remain no impact.

7.5.3 Air Quality

Similar to buildout of the proposed project, this alternative would result in an increase in emissions in the city that have the potential to exceed the Ventura County APCD's significance thresholds. Because this project would result in a reduction in single-family dwelling units and an increase in multifamily dwelling units, it is anticipated that emissions associated with this alternative would be slightly less in comparison to the proposed project. Like the proposed project, implementation of this alternative would also result in significant impacts regarding consistency with the AQMP, cumulatively considerable net increase of pollutants for which the project region is in nonattainment, and exposing sensitive receptors to substantial pollutant concentrations. In comparison to the proposed project, this alternative would slightly reduce impacts, but impacts would remain significant.

7.5.4 Biological Impacts

Under this alternative, biological resource impacts would be slightly reduced compared to the proposed project because the intent of this alternative is to retain more open space by allowing for an increase in residential densities in the city center and a reduction in single-family development in areas designated within fire hazard severity zones and opens space areas where there is a potential for sensitive habitat. A number of special status plant species and special status wildlife species are known to occur in or immediately adjacent to the city or are known to occur in the region based on historical data. Under this alternative, land use intensity would increase and allow for retainment of open space and reduced development compared to the proposed project. Federal and state regulations require development projects to assess and mitigate potential biological resources within a project site. This alternative could result in slight reduction in the loss of habitat, and the mitigation measures identified for the project would be applicable to this alternative. Overall, impacts on biological resources would be slightly less than the proposed project; however, cumulative loss of habitat would remain significant.

7.5.5 Cultural Resources

Cultural resource impacts are primarily associated with potential ground disturbance and development of previously undisturbed areas, or impacts to potential historic structures (building additions, demolition, etc.).

Development may still occur under this alternative. Mitigation measures for the proposed project would be applicable to this alternative and would mitigate potential impacts to archeological resources. However, like the proposed project, this alternative would have the potential to impact historic buildings as a result of redevelopment, especially if redevelopment would occur in the developed city center. Therefore, impacts to potential cultural resources would be the same as the proposed project and would remain significant.

7.5.6 Energy

Similar to buildout of the proposed project, this alternative would result in an increase in energy use in the city but to a slightly less extent than the proposed project because of an increase in density without a corresponding increase in units. In general, impacts to energy use under this alternative would be slightly less compared to the proposed project, and would be less than significant.

7.5.7 Geology and Soils

As with the proposed project, individual development projects under this alternative would be required to prepare site-specific geotechnical investigations to evaluate seismic, liquefaction, ground settlement, paleontological resources, and/or soil expansion hazards. All development projects would be required to comply with existing federal, state, and local regulations, such as the California Building Code and statewide Construction General Permit. Therefore, impacts be the same as proposed project, and would be less than significant.

7.5.8 Greenhouse Gas Emissions

Similar to buildout of the proposed project, this alternative would result in an increase in GHG emissions in the city. Local GHG emissions reduction measures are necessary to align the City with the GHG reduction targets of the state. Because this project would result in a reduction in single-family dwelling units and an increase in multifamily dwelling units; it is anticipated that GHG emissions associated with this alternative would be slightly less in comparison to the proposed project. Policies and implementation measures for the proposed project would be applicable to this alternative and would have the potential to reduce GHG emissions from new and existing development. Overall, impacts of this alternative would be slightly reduced compared to the proposed project but would remain significant.

7.5.9 Hazards and Hazardous Materials

In both this alternative and the proposed Moorpark General Plan 2050, land uses throughout the city would be required to comply with existing federal, state, and local regulations governing use, storage, transport, and disposal of hazardous materials and hazardous wastes. Structures built in fire hazard severity zones would be required to comply with building standards in the California Building Code and the California Fire Code. However, under this alternative, the new policies that would reduce potential hazards would not be implemented. This alternative would result in similar impacts compared to the proposed project, and impacts would remain significant for wildfire hazards.

7.5.10 Hydrology and Water Quality

This alternative would increase intensity of development in areas previously developed and reduce development intensity in areas that are currently undeveloped. Future project-specific WQMPs, preliminary and/or final, will be prepared consistent with the prevailing terms and conditions of the City Local Implementation Plan and Model WQMP at the time of project application. Moreover, Low Impact Development and water quality treatment solutions prescribed in project-specific WQMPs shall be designed to support or enhance the regional BMPs and efforts implemented by the City as part of its efforts to improve water quality. During construction, project-specific SWPPPs are required to be prepared in accordance with the site-specific sediment risk analyses based on the grading plans. The SWPPP must describe construction BMPs that address pollutant source reduction and provide measures/controls necessary to mitigate potential pollutant sources. This alternative may result in less construction impact because fewer undeveloped sites would be developed, which could reduce stormwater pollutants during operation and construction activities. Potential impacts on water quality would be slightly less than the proposed project, and impacts would remain less than significant.

7.5.11 Land Use and Planning

This alternative would include an update to be consistent with new or updated state and local planning laws. Under this alternative, there would be an increased density in the city and near transit, and this would be consistent with the RTP/SCS goals to provide transit services to the city. Overall land use impacts would be similar to the proposed project under this alternative and would be less than significant.

7.5.12 Mineral Resources

The proposed project and this alternative would result in similar impacts to mineral resources. Moorpark does not contain mineral resources of statewide, regional, or local significance. The city is primarily underlain by MRZ-1, MRZ-3, and MRZ-4 land. Overall, the impact to mineral resources would be similar to the proposed project and remain no impact.

7.5.13 Noise

Construction and operational noise impacts would be the similar as the proposed project under this alternative. Like the proposed project, construction activities under this alternative could occur close to sensitive receptors. Mitigation measures for the proposed project would be applicable to this alternative and would mitigate potential construction-related noise and vibration impacts, but impacts would remain significant.

This alternative may result in a reduction of vehicle trips because this alternative would result in a more concentrated development in the city center and a reduction in development in undeveloped areas of the city compared to the proposed project. However, the reduction in traffic noise would be negligible in relation to existing traffic volumes. As a result, traffic noise impacts under this alternative would be the same in comparison to the proposed project and would still be significant.

7.5.14 Population and Housing

This alternative would result in the same number of dwelling units and employment as the proposed project and have a similar job-to-housing ratio. Therefore, population and housing impacts of this alternative would be the same as proposed project and remain less than significant.

7.5.15 Public Services

This alternative would result in the same population and employment as the proposed project. Impacts on public services, including fire, police, school, and library services, would be the same under this alternative and would be less than significant.

7.5.16 Recreation

This alternative would result in the same population as the proposed project and result in the same demand on recreation and recreational services in the city. Therefore, impacts under this alternative would be the same compared to the proposed project and would remain less than significant.

7.5.17 Transportation

This alternative would reduce VMT per service population compared to the proposed project because of the slight improvement in transportation efficiency as a result of intensification of the land uses surrounding transit and a corresponding decrease in land use intensity in undeveloped areas of the city. Overall, impacts would be slightly reduced under this alternative compared to the proposed project, and impacts would remain less than significant.

7.5.18 Tribal Cultural Resources

Impacts to tribal cultural resources would primarily be associated with potential ground disturbance and development of previously undisturbed areas. Impacts to potential tribal cultural resources would be similar to the proposed project. Mitigation measures for the protection of tribal cultural resources would be applicable to this alternative. Additionally, both the proposed project and this alternative would comply with federal and state regulations pertaining to the protection and preservation tribal cultural resources. Therefore, impacts to potential tribal cultural resources would be similar and less than significant.

7.5.19 Utilities and Service Systems

Impacts on public utilities (sewer, water, stormwater, solid waste) would be reduced under this alternative because the project would result in an increase in density and could be served by existing facilities, which would not require expansion of public utilities. Also, individual projects would be subject to City permits, fees, and applications to ensure that these projects would not pose burdens on the existing infrastructure. Therefore, impacts would be less than the proposed project and would remain less than significant.

7.5.20 Wildfire

Under this alternative, new development would be concentrated in areas outside of very high FHSZs, near the city center, compared to the proposed project. However, new development would still occur in the very high FHSZ and WUI. Therefore, impacts associated with wildfire hazards would be slightly less than the proposed project, but would continue to be significant.

7.5.21 Conclusion

Ability to Reduce Environmental Impacts

Impacts of the Increased Density Land Use Alternative would be similar for aesthetics, agriculture and forestry resources, cultural resources, geology and soils, hazards and hazardous materials, land use and planning, mineral resources, noise, population and housing, public services, recreation, and tribal cultural resources. Impacts would be reduced for air quality, biological resources, energy, GHG emissions, hydrology and water quality, utilities and service systems, and wildfire. No issue areas would result in greater impacts compared to the proposed project.

Ability to Achieve Project Objectives

The Increased Density Land Use Alternative would meet the project objectives but to a lesser extent than the proposed project.

7.6 REDUCED INDUSTRIAL LAND USE ALTERNATIVE

The Moorpark General Plan 2050 designates approximately 177.1 acres for industrial uses (Industrial Flex [IF] and Industrial Park [IP]) in the western portion of the city, west of the Southern California Edison (SCE) substation that is currently undeveloped. Under this alterative, 70.1 undeveloped acres of industrial uses in the western part of the city would instead be designated for Neighborhood Medium Residential (NM)) to allow for multifamily residential development. As a result of this designation, this alternative would result in a reduction of approximately three million square feet of industrial, with a corresponding decrease of 4,412 employees[1] and an increase of up to 1,697 additional dwelling units[2] in the city (see Table 7-1).

7.6.1 Aesthetics

This alternative would result in a similar scale and intensity of development as the proposed project, with the exception of an approximately 70-acre site west of the SCE substation. Industrial areas may still be developed but would be designated for multifamily residential under this alternative. However, the City's municipal code identifies development standards to ensure quality development in the city. The aesthetic impacts would be similar to the proposed project and would be less than significant.

[1] Using the factor of 698 square feet/ employee based on the calculations used within the General Plan Buildout Memorandum (see Appendix B of the DEIR).

[2] Using the factor of 24 du/acre, which is based on the du/acre for Neighborhood Medium (24 du/acre).

7.6.2 Agriculture and Forestry Resources

In this alternative, new development and redevelopment in the same areas as the proposed Moorpark General Plan 2050 with the exception of the industrial uses in the western portion of the city, west of the SCE substation. Therefore, there would still be a loss of Unique Farmland and Local Farmland. Under this alternative, impacts to farmland would be the same as the proposed project and would be significant.

There are no land use designations or zoning for forest land, timberland, or timberland zoned Timberland Production in the City of Moorpark. Therefore, impacts on forestry resources would be similar to the proposed project and would remain no impact.

7.6.3 Air Quality

Similar to buildout of the proposed project, this alternative would result in an increase in emissions in the City that have the potential to exceed the Ventura County APCD's significance thresholds. Because this project would result in a reduction in industrial square footage in the city compared to the proposed project, this alternative would result in a reduction in truck trips and VMT, which have greater emission rates compared to passenger vehicles. As a result, emissions generated by this alternative would be slightly less in comparison to the proposed project. Like the proposed project, implementation of this alternative would also result in significant impacts regarding consistency with the AQMP, cumulatively considerable net increase of pollutants for which the project region is in nonattainment, and exposing sensitive receptors to substantial pollutant concentrations. In comparison to the proposed project, this alternative would slightly reduce impacts, but impacts would remain significant.

7.6.4 Biological Impacts

Under this alternative, biological resource impacts would be the same as the proposed project. A number of special status plant species and special status wildlife species are known to occur within or immediately adjacent to the city or are known to occur in the region based on historical data. Federal and state regulations require development projects to assess and mitigate potential biological resources within a project site. This alternative and the Moorpark General Plan 2050 would have similar development areas. Therefore, the mitigation measures identified for the project would be applicable to this alternative, and impacts on biological resources would be the same as the proposed project. Impacts would remain significant.

7.6.5 Cultural Resources

Cultural resource impacts are primarily associated with potential ground disturbance and development of previously undisturbed areas, or impacts to potential historic structures (building additions, demolition, etc.). Development may still occur under this alternative, and mitigation measures for the proposed project would be applicable to this alternative and would mitigate potential impacts to archeological resources. However, like the proposed project, this alternative would have the potential to impact historic buildings as a result of redevelopment. Therefore, impacts to potential cultural resources would be the same as the proposed project and would remain significant.

7.6.6 Energy

Similar to buildout of the proposed project, this alternative would result in an increase in energy use in the city. In general, impacts to energy use under this alternative would be the same compared to the proposed project and would be less than significant.

7.6.7 Geology and Soils

As with the proposed project, individual development projects under this alternative would be required to prepare site-specific geotechnical investigations to evaluate seismic, liquefaction, ground settlement, paleontological resources, and/or soil expansion hazards. All development projects would be required to comply with existing federal, state, and local regulations, such as the California Building Code and statewide Construction General Permit. Since development under this alternative may occur in the same locations, impacts would be the same as proposed project and would be less than significant.

7.6.8 Greenhouse Gas Emissions

Similar to buildout of the proposed project, this alternative would result in an increase in emissions in the city that have the potential to exceed the Ventura County APCD's significance thresholds. Because this project would result in a reduction in industrial square footage in the city compared to the proposed project, this alternative would result in a reduction in truck trips and VMT, which have greater emission rates compared to passenger vehicles. As a result, emissions generated by this alternative would be slightly less in comparison to the proposed project. Policies and implementation measures for the proposed project would be applicable to this alternative and would have the potential to reduce GHG emissions from new and existing development. Overall, impacts of this alternative would be slightly reduced compared to the proposed project but would remain significant.

7.6.9 Hazards and Hazardous Materials

In both this alternative and the proposed project, land uses throughout the city would be required to comply with existing federal, state, and local regulations governing use, storage, transport, and disposal of hazardous materials and hazardous wastes. Structures built in FHSZs would be required to comply with building standards in the California Building Code and the California Fire Code. This alternative would result in a reduction of industrial uses and would replace them with residential uses, which would result in less use of hazardous materials. This alternative would result in less impacts compared to the proposed project and impacts would remain significant for wildfire hazards.

7.6.10 Hydrology and Water Quality

This alternative would have similar development compared to the proposed project. However, this area is already developed. Future project-specific WQMPs, preliminary and/or final, will be prepared consistent with the prevailing terms and conditions of the City Local Implementation Plan and Model WQMP at the time of project application. Moreover, Low Impact Development and water quality treatment solutions prescribed in project-specific WQMPs shall be designed to support or enhance the regional BMPs and efforts implemented

by the City as part of its efforts to improve water quality. During construction, project-specific SWPPPs are required to be prepared in accordance with the site-specific sediment risk analyses based on the grading plans. The SWPPP must describe construction BMPs that address pollutant source reduction and provide measures/controls necessary to mitigate potential pollutant sources. This alternative may result in less operational impacts because there would be fewer industrial uses in the city, which may have slightly greater impacts on stormwater pollutants during operation and construction activities. Potential impacts on water quality would be slightly less than the proposed project and impacts would remain less than significant.

7.6.11 Land Use and Planning

This alternative would have a similar development impact area and neither this alternative nor the proposed project would divide an established community. This alternative would include an update to be consistent with new or updated state and local planning laws. Under this alternative, there would be a slightly greater impact on the jobs-housing balance because employment is expected to decrease and housing is expected to increase; however impacts would remain less than significant. Therefore, the land use impacts would be slightly higher under this alternative in comparison to the proposed project, but would still be less than significant.

7.6.12 Mineral Resources

The proposed project and this alternative would result in similar impacts to mineral resources. Moorpark does not contain mineral resources of statewide, regional, or local significance. The city is primarily underlain by MRZ-1, MRZ-3, and MRZ-4 land. Overall, the impact to mineral resources would be similar to the proposed project and remain no impact.

7.6.13 Noise

Construction noise impacts would be the similar as the proposed project under this alternative. Like the proposed project, construction activities under this alternative could occur close to sensitive receptors. Mitigation measures for construction-related noise and vibration would be applicable to this alternative and would reduce potential impacts, but impacts would remain significant.

Operational noise impacts would be slightly less than the proposed project under this alternative. This alternative would generate a fewer number of trips from large trucks compared to the proposed project and potentially fewer stationary sources of noise (e.g., truck idling, etc.). Noise impacts would be the slightly reduced under this alternative in comparison to the proposed project but would remain significant.

7.6.14 Population and Housing

This alternative would result in an increase of 6,691 people, a reduction of 4,412 employees compared to the proposed project, resulting in a decrease in the jobs-housing ratio. Therefore, population and housing impacts of this alternative would be slightly greater than the proposed project but remain less than significant.

7.6.15 Public Services

This alternative would result in an increase in population and a decrease in employment compared to the proposed project. In general, an increase of residential uses results in an increased demand for public services, including fire, police, school, and library services. Therefore, impacts would be slightly greater than the proposed project but would remain less than significant.

7.6.16 Recreation

This alternative would result in an increased population as the proposed project; and therefore, would increase the demand on recreation and recreational services in the city. However, similar to the proposed project, implementation actions in the general plan would ensure the impact to recreational services would be less than significant. Therefore, impacts under this alternative would slightly greater compared to the proposed project but would remain less than significant.

7.6.17 Transportation

Because this project would result in a reduction in industrial square footage in the city compared to the proposed project, this alternative would result in a reduction in truck trips and truck VMT and an increase in passenger vehicle VMT. Because there would be fewer local employment opportunities, it is assumed that this alternative would result in a slight increase in VMT per service population, but overall VMT per service population would be reduced from existing conditions. This alternative would slightly increase project-related VMT impacts compared to the proposed project because of the increase in population and housing. Overall, impacts would be slightly increased under this alternative compared to the proposed project; however, impacts would remain less than significant.

7.6.18 Tribal Cultural Resources

Impacts to tribal cultural resources would primarily be associated with potential ground disturbance and development of previously undisturbed areas. Impacts to potential tribal cultural resources would be similar to the proposed project. Mitigation measures for the protection of tribal cultural resources would be applicable to this alternative. Additionally, both the proposed project and this alternative would comply with federal and state regulations pertaining to the protection and preservation tribal cultural resources. Therefore, impacts to potential tribal cultural resources would be similar and less than significant.

7.6.19 Utilities and Service Systems

Impacts on public utilities (sewer, water, and solid waste) would be slightly increased under this alternative because the project would result in an increase in residential uses and a decrease in industrial uses, which typically have a lower water and sewer demand. However, the increase in sewer, water, and solid waste demand could be served by existing facilities and would not require expansion of public utilities. Additionally, individual projects would be subject to City permits, fees, and applications to ensure that these projects would not pose burdens on the existing infrastructure. Therefore, impacts would be greater than the proposed project, but would remain less than significant.

7.6.20 Wildfire

Under this alternative, there would be an increase in population, but development would still occur in the same areas identified under the proposed project. Additionally, under this alternative, policies and goals in the Moorpark General Plan 2050 aimed at reducing wildfire impacts would still be included. Therefore, impacts associated with wildfire hazards would be the same as the proposed project and would remain significant.

7.6.21 Conclusion

Ability to Reduce Environmental Impacts

Impacts of the Reduced Industrial Land Use Alternative would be similar for aesthetics, agriculture and forestry resources, biological resources, cultural resources, geology and soils, mineral resources, tribal cultural resources, and wildfire. Impacts would be reduced for air quality, GHG emissions, hazards and hazardous materials, hydrology and water quality, and noise. Impacts would be greater for land use and planning, population and housing, public services, recreation, transportation, and utilities and system services.

Ability to Achieve Project Objectives

The Reduced Industrial Land Use Alternative would meet the project objectives but to a lesser extent than the proposed project.

7.7 ENVIRONMENTALLY SUPERIOR ALTERNATIVE

CEQA requires a lead agency to identify the "environmentally superior alternative" and, in cases where the "No Project" Alternative is environmentally superior to the proposed project, the environmentally superior development alternative must be identified. One alternative has been identified as "environmentally superior" to the proposed project:

- Increased Density Land Use Alternative

The Increased Density Land Use Alternative has been identified as the environmentally superior alternative. As shown in Table 7-3, *Summary of Impacts of Alternatives Compared to the Proposed Project*, and Table 7-4, *Ability of Each Alternative to Meet the Project Objectives*, this alternative lessens impacts to nine impact areas and does not result in greater impacts to any issue areas, while also achieving the benefits of the project objectives.

7. Alternatives to the Proposed Project

Table 7-3 Summary of Impacts of Alternatives Compared to the Proposed Project

Topic	Proposed Project	No Project/Current General Plan Alternative	Increased Density Land Use Alternative	Reduced Industrial Land Use Alternative
Aesthetics	LTS	=	=	=
Agricultural & Forestry Resources	S/U	=	=	=
Air Quality	S/U	=	=	–
Biological Resources	S/U	=	–	=
Cultural Resources	S/U	=	–	=
Energy	LTS	=	=	=
Geology and Soils	LTS/M	=	–	=
GHG Emissions	S/U	=	=	–
Hazards and Hazardous Materials	S/U	=	–	–
Hydrology and Water Quality	LTS	=	=	–
Land Use and Planning	LTS	+	–	+
Mineral Resources	NI	=	=	=
Noise	S/U	=	=	–
Population and Housing	LTS	=	=	+
Public Services	LTS	–	=	+
Recreation	LTS	–	=	+
Transportation	LTS	=	=	+
Tribal Cultural Resources	LTS/M	=	–	=
Utilities and Service Systems	LTS	–	=	+
Wildfire	S/U	=	–	=

Notes: NI= No Impact; LTS = Less than Significant; LTS/M = Less than Significant with Mitigation Incorporated; S/U = Significant and Unavoidable
(*) The alternative would eliminate an impact of the proposed project and impacts would be substantially reduced
(–) The alternative would result in less of an impact than the proposed project.
(+) The alternative would result in greater impacts than the proposed project.
(=) The alternative would result in the same/similar impacts as the proposed project.

Table 7-4 Ability of Each Alternative to Meet the Project Objectives

Objective	Proposed Project	No Project/Current General Plan Alternative	Increased Density Land Use Alternative	Reduced Industrial Land Use Alternative
Sustainable growth through well-planned development that provides for the needs of Moorpark's residents and businesses, makes efficient use of land and infrastructure, protects important environmental resources, promotes the health of the community, and maintains the unique character distinguishing the City as a special place in the region.	Yes	Yes – To a Lesser Extent	Yes	Yes – To a Lesser Extent
A city of distinct, compact, and walkable centers and corridors, surrounded by diverse and complete neighborhoods, and connected to a unifying network of greenways and open spaces.	Yes	Yes – To a Lesser Extent	Yes- To a Greater Extent	Yes
Fair and equitable access for all residents to employment, housing, parks, education, recreation, transportation, retail, and public services, including participation in governmental decision-making.	Yes	Yes – To a Lesser Extent	Yes	Yes
Well-designed housing that is diverse in product type, occupancy, location, affordability, and tenure and that meets the existing and future needs of residents.	Yes	Yes – To a Lesser Extent	Yes – To a Lesser Extent	Yes
Vital, active, prosperous, and well-designed commercial centers and corridors that offer a diversity of goods, services, and entertainment and contribute a positive experience for Moorpark's residents and visitors.	Yes	Yes – To a Lesser Extent	Yes	Yes
A diversity of well-designed districts and corridors containing an integrated mix of commercial, office, and/or housing that enable Moorpark's residents to live close to businesses and employment, reduce automobile use, and actively engage and enhance pedestrian activity.	Yes	Yes – To a Lesser Extent	Yes	Yes – To a Lesser Extent
A transportation system supporting uses accommodated by the Land Use Plan and providing for the safe and efficient movement of people of all ages and abilities, goods, and services into, out of, and through the City of Moorpark.	Yes	Yes – To a Lesser Extent	Yes	Yes
A citywide system of safe, efficient, and attractive bicycle, pedestrian and multi-use trail routes for commuter, school, and recreational use.	Yes	Yes – To a Lesser Extent	Yes	Yes

7. Alternatives to the Proposed Project

Table 7-4 Ability of Each Alternative to Meet the Project Objectives

Objective	Proposed Project	No Project/Current General Plan Alternative	Increased Density Land Use Alternative	Reduced Industrial Land Use Alternative
Transportation systems and utility infrastructure that supports Moorpark's neighborhoods and business districts, are efficient, and employ best practices for environmental sustainability and carbon reduction.	Yes	Yes – To a Lesser Extent	Yes	Yes
A self-sustaining, innovative, and resilient local economy that provides goods and services desired by local residents, promotes growth in living-wage jobs and access to lifelong learning, attracts regional consumer spending, and contributes to Moorpark's premier quality of life.	Yes	Yes – To a Lesser Extent	Yes	Yes – To a Lesser Extent
Protection of scenic topographic features and elements that contribute to Moorpark's unique aesthetic and visual qualities and promote the quality of life that Moorpark citizens pursue.	Yes	Yes – To a Lesser Extent	Yes- To a Greater Extent	Yes

8. Impacts Found Not to Be Significant

California Public Resources Code Section 21003 (f) states: "…it is the policy of the state that… [a]ll persons and public agencies involved in the environmental review process be responsible for carrying out the process in the most efficient, expeditious manner in order to conserve the available financial, governmental, physical, and social resources with the objective that those resources may be better applied toward the mitigation of actual significant effects on the environment." This policy is reflected in the State California Environmental Quality Act (CEQA) Guidelines (Guidelines) Section 15126.2(a), which states that "[a]n EIR [environmental impact report] shall identify and focus on the significant environmental impacts of the Proposed Project" and Section 15143, which states that "[t]he EIR shall focus on the significant effects on the environment." The Guidelines allow use of an Initial Study to document project effects that are less than significant (Guidelines Section 15063[a]). Guidelines Section 15128 requires that an EIR contain a statement briefly indicating the reasons that various possible significant effects of a project were determined not to be significant, and were therefore not discussed in detail in the program Draft EIR.

As described in the Notice of Preparation (NOP) prepared for the proposed project, the City of Moorpark determined a full-scope EIR would be required to evaluate all impacts within the 20 environmental categories; therefore, all categories are evaluated in Chapter 5, *Environmental Analysis*, of this EIR.

8. Impacts Found Not to Be Significant

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9. Significant Irreversible Changes Due to the Proposed Project

Section 15126.2(c) of the CEQA Guidelines requires that an Environmental Impact Report (EIR) describe any significant irreversible environmental changes that would be caused by the proposed project should it be implemented. Specifically, the CEQA Guidelines state:

> Uses of nonrenewable resources during the initial and continued phases of the project may be irreversible since a large commitment of such resources makes removal or nonuse thereafter unlikely. Primary impacts and, particularly, secondary impacts (such as highways improvement which provides access to a previously inaccessible area) generally commit future generations to similar uses. Also, irreversible damage can result from environmental accidents associated with the project. Irretrievable commitments of resources should be evaluated to assure that such current consumption is justified.

In the case of the Moorpark General Plan 2050, implementation would cause the following significant irreversible changes:

- Implementation of the proposed project would include construction activities that would entail the commitment of nonrenewable and/or slowly renewable energy resources; human resources; and natural resources such as lumber and other forest products, sand and gravel, asphalt, steel, copper, lead, other metals, water, and fossil fuels. Future developments in accordance with the proposed project would require the use of natural gas and electricity, fossil fuels, and water. The commitment of resources required for the construction and operation of the proposed project would limit the availability of such resources for future generations or for other uses during the life of the project.

- An increased commitment of social services and public maintenance services would also be required (e.g., police, fire, schools, libraries, and sewer and water services). The energy and social service commitments would be long-term obligations in view of the low likelihood of returning the land to its original condition once it has been developed.

- Population growth related to project implementation would increase vehicle trips over the long term. Emissions associated with such vehicle trips would continue to contribute to the South Central Coast Air Basin's nonattainment designation for ozone (O_3) and particulate matter (PM_{10}).

9. Significant Irreversible Changes Due to the Proposed Project

- Future development in accordance with the Moorpark General Plan 2050 is a long-term irreversible commitment of vacant parcels of land or redevelopment of existing developed land in the city.

Given the low likelihood that the land would revert to lower intensity uses or to its current form, the proposed project would generally commit future generations to these environmental changes.

10. Growth-Inducing Impacts of the Proposed Project

Pursuant to Sections 15126(d) and 15126.2(d) of the CEQA Guidelines, this section is provided to examine ways in which the proposed project could foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment. Also required is an assessment of other projects that would foster other activities which could affect the environment, individually or cumulatively. To address this issue, potential growth-inducing effects will be examined through analysis of the following questions:

- Would this project remove obstacles to growth, e.g., through the construction or extension of major infrastructure facilities that do not presently exist in the project area, or through changes in existing regulations pertaining to land development?
- Would this project result in the need to expand one or more public services to maintain desired levels of service?
- Would this project encourage or facilitate economic effects that could result in other activities that could significantly affect the environment?
- Would approval of this project involve some precedent-setting action that could encourage and facilitate other activities that could significantly affect the environment?

Please note that growth-inducing effects are not to be construed as necessarily beneficial, detrimental, or of little significance to the environment. This issue is presented to provide additional information on ways in which this project could contribute to significant changes in the environment, beyond the direct consequences of developing the land use concept examined in the preceding sections of this Environmental Impact Report.

Would this project remove obstacles to growth, e.g., through the construction or extension of major infrastructure facilities that do not presently exist in the project area, or through changes in existing regulations pertaining to land development?

Approval and implementation of the Moorpark General Plan 2050 could not remove obstacles to growth. Portions of the city are already served by infrastructure. Implementation of the Moorpark General Plan 2050 would allow for development of currently undeveloped and redevelopment of existing land uses. This would induce construction of infrastructure extensions and improvements, such as roadways, storms drains, water and recycled water pipes, sewer collection systems, and energy/communication extensions toward undeveloped areas of the city. In addition, the proposed project would increase demand for electricity and

natural gas that could require expansion of energy infrastructure, as provided by Southern California Edison, Clean Power Alliance, and the Southern California Gas Company. As infrastructure is extended throughout the city, obstacles to growth would be removed. Impacts to existing utilities and service systems and potential needs for future improvements are discussed further in Section 5.19, *Utilities and Service Systems*.

Buildout of the proposed project may require additional firefighting and police personnel, and construction of new and/or expanded facilities to improve response times, if necessary. Buildout may also require future construction of new and/or expanded schools in the Moorpark Unified School District. Impacts from the proposed project on public services facilities are discussed in detail in Section 5.15, *Public Services*.

Buildout of roadways in the city per roadway classifications in the proposed Moorpark General Plan 2050's Circulation Element would increase roadway capacity to maintain adequate levels of service. This would allow for more efficient multimodal transportation throughout the city and would promote the development of land near these enhanced roadways. Proposed roadway classifications and their impacts are described in Section 5.17, *Transportation*.

Would this project result in the need to expand one or more public services to maintain desired levels of service?

As stated above, proposed project buildout may require additional fire and police services, school facilities, and library space to maintain desired levels of service. This would include expanding existing facilities; acquiring land to construct new stations, schools, and libraries; and adequately equipping and staffing new facilities. Section 5.15, *Public Services*, analyzes the impacts of the proposed project on existing public services in more detail.

Would this project encourage or facilitate economic effects that could result in other activities that could significantly affect the environment?

Implementation of the proposed project would not encourage or facilitate economic effects that could result in other activities that could significantly affect the environment. Buildout of the Moorpark General Plan 2050 would increase employment in the city to 20,249 jobs, adding 7,334 more jobs than existing. Impacts of these job-generating land uses and employment pursuant to the Moorpark General Plan 2050 are analyzed throughout Chapter 5, *Environmental Analysis*, of this Draft EIR. No additional impacts would occur.

Would approval of this project involve some precedent-setting action that could encourage and facilitate other activities that could significantly affect the environment?

Cities and counties in California periodically update their general plans pursuant to California Government Code Sections 65300 et seq. Thus, approval of the proposed Moorpark General Plan 2050 would not set a precedent that could encourage and facilitate other activities that could significantly affect the environment.

11. Organizations and Persons Consulted

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