Draft Environmental Impact Report

City of Santa Clarita, Wiley Canyon State Clearinghouse Number 2022030626

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Prepared for:

CITY OF SANTA CLARITA

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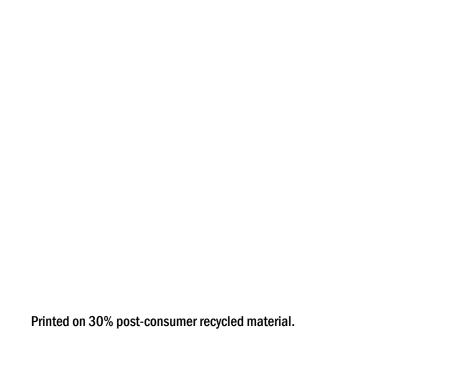


Table of Contents

SEC	CTION			PAGE NO.
Acro	nyms and	d abbrevia	ations	ACR-
1	Execu	utive Sum	nmary	1-1
	1.1		nent Purpose	
	1.2	Docum	nent Organization	1-1
	1.3		t Location	
	1.4	Projec	t Description	1-3
		1.4.1	Project Overview	1-3
		1.4.2	Project Objectives	1-3
	1.5	Areas	of Known Controversy	1-4
	1.6	Requir	red Permits and Approvals	1-5
	1.7	Summ	nary of Environmental Impacts and Mitigation Measures	1-5
	1.8	Summ	nary of Project Alternatives	1-36
		1.8.1	Alternatives Evaluated	1-36
		1.8.2	Environmentally Superior Alternative	1-37
2	Introd	duction		2-1
	2.1	Summ	nary of the Proposed Project	2-1
	2.2	CEQA	Process	2-1
	2.3	Organi	ization of the EIR	2-3
3	Proje	ct Descrip	ption	3-1
	3.1	Projec	t Location	3-1
	3.2	Enviro	nmental Setting	3-2
		3.2.1	Existing On-Site Uses	3-2
		3.2.2	Adjacent and Surrounding Uses	3-3
	3.3	Projec	t Objectives	3-3
	3.4	Propos	sed Project Characteristics	3-4
		3.4.1	Senior Living Facility	3-5
		3.4.2	Multifamily Residential	3-5
		3.4.3	Commercial Uses	3-5
		3.4.4	Recreation/Undeveloped Areas	3-5
		3.4.5	Landscaping	3-6
		3.4.6	Oak Trees	3-6
		3.4.7	Fire Protection and Fuel Modification	3-7
		3.4.8	Utilities and Infrastructure Improvements	3-8
		3.4.9	Circulation and Access	3-10

		3.4.10	Parking	3-11
		3.4.11	Project Design and Sustainability Features	3-11
	3.5	Constr	ruction	3-12
	3.6	Intend	led Uses of the EIR	3-13
	3.7	Project	t Approvals Required	3-13
	3.8	Relate	ed Projects	3-13
4	Enviro	onmental	Impact Analysis	4-1
	4.1	Aesthe	etics	4.1-1
		4.1.1	Environmental Setting	4.1-2
		4.1.2	Regulatory Framework	4.1-4
		4.1.3	Thresholds of Significance	4.1-8
		4.1.4	Impact Analysis	4.1-8
		4.1.5	Mitigation Measures	4.1-18
		4.1.6	Level of Significance After Mitigation	4.1-18
		4.1.7	Cumulative Effects	4.1-18
		4.1.8	References Cited	4.1-19
	4.2	Air Qua	ality	4.2-1
		4.2.1	Environmental Setting	4.2-1
		4.2.2	Regulatory Framework	4.2-11
		4.2.3	Thresholds of Significance	4.2-22
		4.2.4	Methodology	4.2-24
		4.2.5	Impact Analysis	4.2-29
		4.2.6	Mitigation Measures	4.2-40
		4.2.7	Level of Significance After Mitigation	
		4.2.8	Cumulative Effects	4.2-42
		4.2.9	References Cited	4.2-43
	4.3	Biologi	ical Resources	4.3-1
		4.3.1	Environmental Setting	4.3-1
		4.3.2	Regulatory Framework	
		4.3.3	Thresholds of Significance	
		4.3.4	Impacts Analysis	
		4.3.5	Mitigation Measures	
		4.3.6	Level of Significance After Mitigation	4.3-27
		4.3.7	Cumulative Effects	
		4.3.8	References Cited	4.3-30
	4.4		al Resources	
	-	4.4.1	Environmental Setting	
		4.4.2	Regulatory Framework	
		4.4.3	Thresholds of Significance	
			· · · · · · · · · · · · · · · · · · ·	

	4.4.4	Impact Analysis	4.4-17
	4.4.5	Mitigation Measures	4.4-19
	4.4.6	Level of Significance After Mitigation	4.4-20
	4.4.7	Cumulative Effects	4.4-21
	4.4.8	References Cited	4.4-22
4.5	Energy	·	4.5-1
	4.5.1	Existing Conditions	4.5-1
	4.5.2	Regulatory Framework	4.5-2
	4.5.3	Thresholds of Significance	4.5-11
	4.5.4	Impact Analysis	4.5-12
	4.5.5	Mitigation Measures	4.5-17
	4.5.6	Level of Significance After Mitigation	4.5-17
	4.5.7	Cumulative Effects	4.5-17
	4.5.8	References Cited	4.5-17
4.6	Geolog	y and Soils	4.6-1
	4.6.1	Environmental Setting	4.6-1
	4.6.2	Regulatory Framework	4.6-5
	4.6.3	Thresholds of Significance	4.6-9
	4.6.4	Impact Analysis	4.6-9
	4.6.5	Mitigation Measures	4.6-14
	4.6.6	Level of Significance After Mitigation	4.6-15
	4.6.7	Cumulative Effects	4.6-15
	4.6.8	References Cited	4.6-16
4.7	Greenl	nouse Gas Emissions	4.7-1
	4.7.1	Environmental Setting	4.7-1
	4.7.2	Regulatory Framework	4.7-7
	4.7.3	Thresholds of Significance	4.7-27
	4.7.4	Methodology	4.7-29
	4.7.5	Impact Analysis	4.7-33
	4.7.6	Mitigation Measures	4.7-68
	4.7.7	Level of Significance After Mitigation	4.7-68
	4.7.8	Cumulative Effects	4.7-69
	4.7.9	References Cited	4.7-69
4.8	Hazard	ds and Hazardous Materials	4.8-1
	4.8.1	Environmental Setting	4.8-1
	4.8.2	Regulatory Framework	4.8-3
	4.8.3	Thresholds of Significance	4.8-7
	4.8.4	Impact Analysis	4.8-8
	4.8.5	Mitigation Measures	4.8-13
	4.8.6	Level of Significance After Mitigation	4.8-13

	4.8.7	Cumulative Effects	4.8-13
	4.8.8	References Cited	4.8-14
4.9	Hydrolo	ogy and Water Quality	4.9-1
	4.9.1	Environmental Setting	4.9-1
	4.9.2	Regulatory Framework	4.9-4
	4.9.3	Thresholds of Significance	4.9-11
	4.9.4	Impact Analysis	4.9-12
	4.9.5	Mitigation Measures	4.9-18
	4.9.6	Level of Significance After Mitigation	4.9-18
	4.9.7	Cumulative Effects	4.9-19
	4.9.8	References Cited	4.9-20
4.10	Land U	se and Planning	4.10-1
	4.10.1	Environmental Setting	4.10-1
	4.10.2	Regulatory Framework	4.10-2
	4.10.3	Thresholds of Significance	4.10-8
	4.10.4	Impacts Analysis	4.10-8
	4.10.5	Mitigation Measures	4.10-57
	4.10.6	Level of Significance After Mitigation	4.10-58
	4.10.7	Cumulative Effects	4.10-58
	4.10.8	References Cited	4.10-58
4.11	Minera	l Resources	4.11-1
	4.11.1	Environmental Setting	4.11-1
	4.11.2	Regulatory Framework	4.11-3
	4.11.3	Thresholds of Significance	4.11-6
	4.11.4	Impacts Analysis	4.11-6
	4.11.5	Mitigation Measures	4.11-7
	4.11.6	Level of Significance After Mitigation	4.11-7
	4.11.7	Cumulative Effects	4.11-8
	4.11.8	References Cited	4.11-8
4.12	Noise		4.12-1
	4.12.1	Environmental Setting	4.12-1
	4.12.2	Regulatory Framework	4.12-7
	4.12.3	Thresholds of Significance	4.12-10
	4.12.4	Impact Analysis	4.12-11
	4.12.5	Mitigation Measures	4.12-21
	4.12.6	Level of Significance After Mitigation	4.12-22
	4.12.7	Cumulative Impacts	4.12-22
	4.12.8	References Cited	4.12-23
4.13	Popula	tion and Housing	4.13-1
	-	Environmental Setting	
	4.13.2	Regulatory Framework	4.13-2

	4.13.3 Thresholds of Significance	4.13-4
	4.13.4 Impact Analysis	4.13-5
	4.13.5 Mitigation Measures	4.13-7
	4.13.6 Level of Significance After Mitigation	4.13-7
	4.13.7 Cumulative Effects	4.13-7
	4.13.8 References Cited	4.13-8
4.14	Public Services	4.14-1
	4.14.1 Environmental Setting	4.14-1
	4.14.2 Regulatory Framework	4.14-4
	4.14.3 Thresholds of Significance	4.14-9
	4.14.4 Impacts Analysis	4.14-9
	4.14.5 Mitigation Measures	4.14-15
	4.14.6 Level of Significance After Mitigation	4.14-15
	4.14.7 Cumulative Effects	4.14-15
	4.14.8 References Cited	4.14-16
4.15	Recreation	4.15-1
	4.15.1 Environmental Setting	4.15-1
	4.15.2 Regulatory Framework	4.15-3
	4.15.3 Thresholds of Significance	4.15-4
	4.15.4 Impacts Analysis	4.15-4
	4.15.5 Mitigation Measures	4.15-7
	4.15.6 Level of Significance After Mitigation	4.15-7
	4.15.7 Cumulative Effects	4.15-7
	4.15.8 References Cited	4.15-7
4.16	Transportation	4.16-1
	4.16.1 Environmental Setting	4.16-1
	4.16.2 Regulatory Framework	4.16-3
	4.16.3 Methodology	4.16-8
	4.16.4 Thresholds of Significance	4.16-12
	4.16.5 Impact Analysis	4.16-13
	4.16.6 Project Design Features and Mitigation Measures	4.16-20
	4.16.7 Level of Significance After Mitigation	4.16-20
	4.16.8 Cumulative Effects	4.16-21
	4.16.9 References Cited	4.16-21
4.17	Tribal Cultural Resources	4.17-1
	4.17.1 Environmental Setting	4.17-1
	4.17.2 Regulatory Framework	4.17-11
	4.17.3 Thresholds of Significance	4.17-14
	4.17.4 Impact Analysis	4.17-14
	4.17.5 Mitigation Measures	4.17-15

		4.17.6 Level of Significance After Mitigation	4.17-15
		4.17.7 Cumulative Effects	4.17-16
		4.17.8 References Cited	4.17-16
	4.18	Utilities and Service Systems	4.18-1
		4.18.1 Environmental Setting	4.18-1
		4.18.2 Regulatory Framework	4.18-4
		4.18.3 Thresholds of Significance	4.18-8
		4.18.4 Impact Analysis	4.18-9
		4.18.5 Mitigation Measures	4.18-14
		4.18.6 Level of Significance After Mitigation	4.18-14
		4.18.7 Cumulative Effects	4.18-14
		4.18.8 References Cited	4.18-15
	4.19	Wildfire	4.19-1
		4.19.1 Existing Conditions	4.19-1
		4.19.2 Regulatory Framework	4.19-5
		4.19.3 Thresholds of Significance	4.19-14
		4.19.4 Impact Analysis	4.19-15
		4.19.5 Mitigation Measures	4.19-23
		4.19.6 Level of Significance After Mitigation	4.19-23
		4.19.7 Cumulative Effects	4.19-24
		4.19.8 References Cited	4.19-25
5	Other	CEQA Considerations	5-1
	5.1	Effects Found Not to Be Significant	
		5.1.1 Agricultural Resources	
	5.2	Significant and Unavoidable Environmental Effects	5-1
		5.2.1 Noise (Temporary or Permanent Increase in Ambient Noise Levels)	5-2
	5.3	Significant Irreversible Environmental Effects	5-2
	5.4	Growth-Inducing Impacts	5-3
	5.5	References Cited	5-4
6	Altern	natives	6-1
•	6.1	Introduction	
	6.2	Project Objectives	
	6.3	Alternatives Considered but Rejected	
	0.0	6.3.1 Alternative Site	
	6.4	Alternatives Under Consideration	
	J	6.4.1 Alternative 1 - No Project/No Build Alternative	
		6.4.2 Alternative 2 – Affordable Housing Alternative	
		6.4.3 Alternative 3 – Private Recreational Facility Alternative	
		6.4.4 Alternative 4 - Construction Noise Setback Alternative	

	6.5	Evaluation of Alternatives	6-36	
	6.6	Environmentally Superior Alternative	6-40	
	6.7	References Cited	6-41	
7	List of	f Preparers	7-1	
	7.1	Client		
	7.2	Dudek		
FIGUI	RES			
3-1	Projec	et Location	3-15	
3-2a	Existir	ng Conditions	3-17	
3-2b	Zonin	g	3-19	
3-2c	Land	Use	3-21	
3-3	Site D	Pevelopment Plan	3-23	
3-4a	Tenta	tive Tract Map	3-25	
3-4b	Tenta	tive Tract Map	3-27	
3-4c	Tenta	tive Tract Map	3-29	
3-5	Conce	eptual Elevations	3-31	
3-6	Conceptual Landscape Plan3-33			
3-7	Fire Access			
3-8	Propo	sed Project Mobility Plan	3-37	
4.3-1	Veget	ation Communities and Land Cover	4.3-33	
4.3-2	Aquat	ic Resources	4.3-35	
4.3-3	Impac	cts to Vegetation Communities	4.3-37	
4.6-1	Regio	nal Faults	4.6-17	
4.9-1	FEMA	Flood Zones	4.9-21	
4.12-1	Noise	Measurement Locations	4.12-25	
4.16-1	Projec	ct Traffic Analysis Zone	4.16-23	
4.16-2	Projec	ct Site and Traffic Study Area	4.16-25	
4.16-3	Existir	ng Transit Facilities	4.16-27	
4.16-4	Existir	ng & Future Bike Facilities	4.16-29	
4.19-1	Fire H	azard Severity Zones	4.19-27	
4.19-2	Fire H	listory	4.19-29	
4.19-3	Fire E	vacuation Map	4.19-31	
4.19-4/	A Resp	onsibility Areas	4.19-33	
4.19-4	B Resp	onsibility Areas	4.19-35	
6-1	Altern	ative 2 Site Plan	6-43	
6-2	Altern	ative 3 Site Plan	6-45	
6-3	Altern	ative 4 Site Plan	6-47	

TABLES

1-1	Summary of Project Impacts	1-6
1-2	Comparison of Project and Alternatives Impacts	1-37
3-1	Summary of Project Uses	3-4
3-2	Oak Tree Plan Summary	3-7
3-3	Construction Schedule, Phasing and Trips	3-12
3-4	Related Projects	3-14
4.1-1	Project Consistency with the Community Character and Design Guidelines	4.1-11
4.2-1	Ambient Air Quality in the Project Vicinity	4.2-3
4.2-2	South Coast Air Basin Attainment Classification	4.2-5
4.2-3	Ambient Air Quality Standards	4.2-12
4.2-4	South Coast Air Quality Management District Air Quality Significance Thresholds	4.2-22
4.2-5	Localized Significance Thresholds for the Project	4.2-24
4.2-6	Estimated Maximum Regional Construction Emissions (pounds per day)	4.2-33
4.2-7	Estimated Maximum Operational Emissions (pounds per day)	4.2-34
4.2-8	Estimated Maximum Localized Construction Emissions (pounds per day)	4.2-35
4.2-9	Estimated Maximum Localized Operational Emissions (pounds per day)	4.2-36
4.2-10	Maximum Unmitigated Health Risk Impacts for Off-site Sensitive Receptors	4.2-37
4.2-11	Maximum Cancer Risk Impacts for On-site Residential Receptors	4.2-39
4.2-12	Estimated Maximum Mitigated Regional Construction Emissions (pounds per day)	4.2-41
4.2-13	Maximum Mitigated Health Risk Impacts for Off-site Sensitive Receptors	4.2-42
4.3-1	Vegetation Communities and Land Cover on the Project Site	4.3-2
4.3-2	Oak Tree Plan Summary	4.3-7
4.4-1	Previous Cultural Resource Studies Within 1.0-Mile of the Project Site	4.4-6
4.4-2	Previously Recorded Cultural Resources Within 1.0-Mile of the Project Site	4.4-9
4.4-3	Summary of Outreach with Native American Heritage Commission-Listed Native American Contacts	4.4-11
4.5-1	Hours of Operation for Construction Equipment	
4.5-2	Construction Equipment Diesel Demand	
4.5-3	Construction Worker Vehicle Gasoline Demand	
4.5-4	Petroleum Consumption - Operation	
4.6-1	List of Earthquake Faults	
4.7-1	Regulated Greenhouse Gas's Reported GWP Values	
4.7-2	State of California Greenhouse Gas Emissions	
4.7-3	City of Santa Clarita Greenhouse Gas Emissions	4.7-4
4.7-4	Estimated Project Construction Greenhouse Gas Emissions	
4.7-5	Estimated Operational Greenhouse Gas Emissions for Buildout Year	
4.7-6	Consistency Analysis with Applicable 2022 Scoping Plan Actions and Strategies	

4.7-7	Project Consistency with Applicable Goals of SCAG's 2020-2045 RTP/SCS	4.7-58
4.7-8	Consistency with City of Santa Clarita General Plan	4.7-61
4.10-1	Desired Development Characteristics Consistency Analysis	4.10-11
4.10-2	General Plan Land Use Consistency Analysis	4.10-14
4.12-1	Typical Noise Levels Associated with Common Activities	4.12-3
4.12-2	Ambient Noise Measurements	4.12-6
4.12-3	Construction Vibration Damage Criteria	4.12-8
4.12-4	Guideline Vibration Damage Potential Threshold Criteria	4.12-9
4.12-5	City Noise Limits	4.12-10
4.12-6	Typical Construction Equipment RCNM Default Noise Emission Reference Levels and	
	Usage Factors	
4.12-7	Construction Phasing	4.12-13
4.12-8	Estimated Construction Noise Levels at Existing Off-Site Sensitive Receptors	4.12-13
4.12-9	Existing Baseline Roadway Noise Levels	4.12-16
4.12-10	Existing Roadway with Project Noise Levels	4.12-16
4.12-11	Future Roadway Without and With Project Noise Levels	4.12-17
4.12-12	2 Cumulative Roadway with Project Noise Levels	4.12-17
4.12-13	3 Vibration Source Amplitudes for Construction Equipment	4.12-19
4.12-14	Summary of Construction Equipment and Activity Vibration	4.12-21
4.13-1	City of Santa Clarita Population, Housing, and Employment: Census Data and Forecast	4.13-3
4.14-1	Project Enrollment Generation	4.14-12
4.16-1	City of Santa Clarita VMT Screening Criteria and Threshold	4.16-8
4.16-2	City of Santa Clarita VMT Metrics	4.16-10
4.16-3	Project Trip Generation Summary	4.16-11
4.16-4	Potential to Conflict with 2020-2045 RTP/SCS Goals	4.16-13
4.16-5	VMT Summary	4.16-18
4.17-1	Previous Cultural Resource Studies Within 1.0-Mile of the Project Site	4.17-5
4.17-2	Previously Recorded Cultural Resources Within 1.0-Mile of the Project Site	4.17-8
4.17-3	Tribal Outreach Results for Assembly Bill 52-Listed Contacts	4.17-10
4.18-1	Wholesale and Retail Water Demand and Supply Projections (AF)	4.18-2
4.18-2	Existing Landfills	4.18-3
4.18-3	Water Supply and Demand During Normal Year	4.18-11
4.18-4	Water Supply and Demand During Single Dry Year	4.18-11
4.18-5	Water Supply and Demand During Multiple Dry Years	4.18-11
4.18-6	Solid Waste Generation Estimates	4.18-13
4.19 1	Existing Vegetation and Land Cover	4.19-2
6-1	Proposed Project Trip Generation	6-8
6-2	Summary of Alternative 1 Success at Meeting Project Objectives	6-9

6-3	Alternative 2 vs. Proposed Project Trip Generation Comparison	6-16
6-4	Summary of Alternative 2 Success at Meeting Project Objectives	6-17
6-5	Alternative 3 vs. Proposed Project Trip Generation Comparison	6-25
6-6	Summary of Alternative 3 Success at Meeting Project Objectives	6-26
6-7	Alternative 4 vs. Proposed Project Trip Generation Comparison	6-33
6-8	Summary of Alternative 4 Success at Meeting Project Objectives	6-34
6-9	Comparison of Project and Alternatives Impacts	6-36
6-10	Comparison of Project and Alternatives Meeting Project Objectives	6-38
APPE	INDICES	
A-1	NOP Signed	
A-2	Attendance Sign-In Sheet	
A-3	Submitted Speaker Cards	
A-4	Submitted Comments	
В	Air Quality Technical Report	
C-1	Biological Resources Technical Report	
C-2	Oak Tree Report	
C-3	Aquatic Resources Delineation Report	
D	Cultural Resources Assessment Report	
Е	Geotechnical Report	
F	Paleontological Resources Assessment	
G	Greenhouse Gas Technical Report	
H-1	Phase I Environmental Site Assessment	
H-2a	2004 Phase I Mule Ranch Pt 1	
H-2b	2004 Phase I Mule Ranch Pt 2	
H-2c	2004 Phase I Mule Ranch Pt 3	
H-2d	2004 Phase I Mule Ranch Pt 4	
I-1	Drainage Concept Summary	
I-2	Soil Cement Bank Projection	
J	Noise and Vibration Impact Study	
K-1	VMT Impact Analysis	
K-2	Traffic Count Comparison	
K-3	ADT Comparison	
K-4	Parking Demand Study	
K-5	Traffic Analysis	
L	Water Supply Assessment	

TABLE OF CONTENTS

- M-1 Sewer Area Study
- M-2 Summary of Water Infrastructure Improvements
- N Wildfire Evacuation Plan

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Acronyms and Abbreviations

Acronym/Abbreviation	Definition
AB	Assembly Bill
ACC	Advanced Clean Cars
ACM	asbestos containing materials
ACT	Advanced Clean Trucks
ACTM	Airborne Toxic Control Measure
ADT	average daily trips
AERMOD	USEPA AMS/EPA Regulatory Model
AF	acre-feet
AFY	acre-feet per year
ANSI	American National Standards Institute
APN	Assessor Parcel Numbers
AQMP	Air Quality Management Plans
AR4	Fourth Assessment Report
AR5	Fifth Assessment Report
ASF	age-sensitivity factors
ATCM	adopted an Airborne Toxic Control Measure
BACT	Best Available Control Technology
BAU	business-as-usual
BCF	billion cubic feet
ВМР	best management practices
BP	before present
BTU	British thermal units
CAA	Clean Air Act
CAAQS	California Ambient Air Quality Standards
CalARP	California Accidental Release Prevention Program
CalEEMod	California Emissions Estimator Model
CalEPA	California Environmental Protection Agency
CalGEM	California Geologic Energy Management Division
CALGreen	California Green Building Standards Code
CalTrans	California Department of Transportation
CAP	Climate Action Plan
CAPCOA	California Air Pollution Control Officers Association
CARB	California Air Resources Board
CBC	California Building Code
CBSC	California Building Standards Code
CC	community commercial
CCAA	California Clean Air Act
CCD	Census County Division
CCR	California Code of Regulations
CCRC	Continuing Care Retired Community

Acronym/Abbreviation	Definition
CCS	Carbon Capture Sequestration
CDFW	California Department of Fish and Wildlife
CDR	Carbon Dioxide Removal
CEC	California Energy Commission
CEQA	California Environmental Quality Act
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CESA	California Endangered Species Act
CFC	California Fire Code
CGS	California Geological Survey
CH ₄	Methane
CHP	California Highway Patrol
CHRIS	California Historical Research Information System
Cl	compression ignition
CLWA	Castaic Lake Water Agency
CMU	concrete masonry unit
CN	neighborhood commercial
CNDDB	California Natural Diversity Database
CNEL	community noise equivalent level
CNRA	California Natural Resources Agency
CO	Carbon Monoxide
CO ₂	carbon dioxide
CO ₂ e	carbon dioxide equivalents
CORE	Clean Off-Road Equipment
CPUC	California Public Utilities Commission
CRHR	California Register of Historical Resources
CUP	Conditional Use Permit
CUPA	Certified Unified Program Agency
CWA	Clean Water Act
CWEP	Conceptual Wildfire Evacuation Plan
dB	decibels
dBA	A-weighted decibels
DER	distributed energy resources
DOC	California Department of Conservation
DOGGR	Division Oil, Gas, and Geothermal Resources
DPF	diesel particulate filters
DPM	diesel particulate matter
DTSC	Department of Toxic Substances Control
DWR	California Department of Water Resources
EIA	U.S. Energy Information Administration
EIR	Environmental Impact Report
EISA	Energy Independence and Security Act of 2007
EMFAC	emissions factor model
EPA	U.S. Environmental Protection Agency

Acronym/Abbreviation	Definition		
EPIC	Electric Program Investment Charge		
ESA	Environmental Site Assessment		
ESCP	Erosion and Sediment Control Plan		
EV	electric vehicle		
EVCS	electric vehicle charging station		
FEMA	Federal Emergency Management Agency		
FESA	federal Endangered Species Act		
FHSZ	fire hazard severity zone		
FHWA	Federal Highway Administration		
FICON	Federal Interagency Committee on Noise		
FIRM	Flood Insurance Rate Maps		
FPIP	Food Production Investment Program		
FRAP	Fire and Resource Assessment Program		
FTA	Federal Transit Authority		
FTBMI	Fernandeño Tataviam Band of Mission Indians		
GDP	gross domestic product		
GHG	greenhouse gas		
GSP	Groundwater Sustainability Plans		
GVWR	gross vehicle weight ratings		
GWMP	groundwater management plan		
GWP	Global Warming Potential		
HAP	hazardous air pollutants		
HFC	hydrofluorocarbon		
HHDT	heavy-heavy duty trucks		
HRA	health risk assessments		
HUD	Housing and Urban Development		
HUHSD	Hart Union High School District		
HVAC	heating, ventilation and air conditioning		
ICE	Intersection Control Evaluation		
ICT	Innovative Clean Transit Program		
IEPR	Integrated Energy Policy Report		
IFC	International Fire Code		
ITE	Institute of Transportation Engineers		
IWMA	California Integrated Waste Management Act		
IWMP	Idle Well Management Plans		
kHz	kilohertz		
LACFD	Los Angeles County Consolidated Fire Protection District Fire Department		
LACM	Los Angeles County Museum		
LACSD	Los Angeles County Sanitation District		
LASD	Los Angeles County Sheriff's Department		
LASO	Los Angeles County Sheriff's Office		
LAT	Los Angeles Times		
LBP	lead-based paint		

Acronym/Abbreviation	Definition		
LCFS	Low Carbon Fuel Standard		
LDAR	leak detection and repair		
LEV	Low-Emission Vehicle		
LID	Low Impact Development		
LOMR	Letter of Map Revision		
LOS	level of service		
LRA	Local Responsibility Area		
LRTP	Long Range Transportation Plan		
LST	localized significance threshold		
LUST	Leaking Underground Storage Tank		
MCA	Medieval Climatic Anomaly		
MERV	Minimum Efficiency Reporting Value		
MLD	most likely descendent		
MM	Mitigation Measure		
MMT	million metric tons		
MMT CO ₂ e	million metric tons of CO2e		
MOCA	Mineral/Oil Conservation Area		
mPa	micro-Pascals		
MPO	Metropolitan Planning Organization		
MRF	materials recovery facilities		
MRZ	Mineral Resource Zones		
MS4	municipal separate storm sewer systems		
MSAT	Mobile Source Air Toxics		
MSL	mean sea level		
MT	metric tons		
mtDNA	mitochondrial DNA		
MTYRE	Multi-Track Year Round Education		
MU	Mixed-Use Overlay		
MUN	Municipal and Domestic Supply		
MWELO	Model Water Efficient Landscape Ordinance		
MX-N	Mixed Use - Neighborhood		
N ₂ O	Nitrous Oxide		
NAAQS	National Ambient Air Quality Standards		
NAHC	Native American Heritage Commission		
NCES	National Center for Education Statistics		
NCHRP	National Cooperative Highway Research Program		
NESHAP	National Emission Standards for Hazardous Air Pollutants		
NF ₃	Nitrogen Trifluoride		
NFPA	National Fire Protection Association		
NGO	nongovernmental organizations		
NHMLA	Natural History Museum of Los Angeles County		
NHTSA	National Highway Traffic Safety Administration		
NO	nitric oxide		

Acronym/Abbreviation	Definition		
NO ₂	Nitrogen Dioxide		
NOA	Notice of Availability		
NOP	Notice of Preparation		
NO _x	nitrogen oxides		
NPDES	National Pollution Discharge Elimination System		
NRHP	National Register of Historic Places		
NWL	Natural and Working Lands		
OAERP	Los Angeles County Operational Area Emergency Response Plan		
ОЕННА	Office of Environmental Health Hazard Assessment		
OFFROAD	off-road emissions factor		
OHWM	ordinary high-water mark		
OPR	Office of Planning and Research		
OSHA	Occupational Safety and Health Administration		
OVOV	One Valley One Vision		
P-C	Production-Consumption		
PCC	Portland Cement Concrete		
PCSSD	Placerita Canyon Special Standards District		
PD	Planned Development		
PDF	Project Design Feature		
PFC	perfluorocarbons		
PGA	peak ground acceleration		
PHEV	plug-in hybrid electric vehicles		
PM	Particulate Matter		
PM ₁₀	particulate matter less than 10 microns		
PPV	peak particle velocity		
PRC	Public Resources Code		
PRPA	Paleontological Resources Protection Act		
PV	photovoltaic		
RCNM	Roadway Construction Noise Model		
RCRA	Resource Conservation and Recovery Act		
RFS	Renewable Fuel Standard		
RHNA	Regional Housing Needs Assessment		
RPS	Renewable Portfolio Standard		
RTP	Regional Transportation Plan		
RV	recreational vehicle		
RWQCB	Regional Water Quality Control Board		
SAFE	Safer Affordable Fuel-Efficient		
SAL	Inland Saline Water Habitat		
SAR	IPCC's Second Assessment Report		
SB	Senate Bill		
SCAB	South Coast Air Basin		
SCAG	Southern California Association of Governments		
SCAQMD	South Coast Air Quality Management District		

Acronym/Abbreviation	Definition		
SCCIC	South Central Coast Information Center		
SCE	Southern California Edison		
SCMC	Santa Clarita Municipal Code		
SCS	Sustainable Communities Strategy		
SCT	City of Santa Clarita Transit		
SCV	Santa Clarita Valley		
SCVCTM	Santa Clarita Valley Consolidated Traffic Model		
SCV-GSA	Santa Clarita Valley Groundwater Sustainability Agency		
SCVJSS	Santa Clarita Valley Joint Sewerage System		
SEA	Significant Ecological Area		
SF ₆	Sulfur Hexafluoride		
SFHA	Special Flood Hazard Area		
SGMA	Sustainable Groundwater Management Act		
SIP	State Implementation Plan		
SLCP	short-lived climate pollutant		
SLF	Sacred Lands File		
SLM	Sound Level Meter		
SMARA	Surface Mining and Reclamation Act		
SO ₂	Sulfur Dioxide		
SoCalGas	Southern California Gas Company		
SOP	standard operating procedure		
SPL	Sound pressure level		
SR	State Route		
SRA	Source receptor area		
SRA	State Responsibility Area		
SRRE	Source Reduction and Recycling Element		
SSC	Species of Special Concern		
SVP	Society for Vertebrate Paleontology		
SWP	State Water Project		
SWPPP	Stormwater Pollution Prevention Plan		
SWRCB	State Water Resources Control Board		
TA	Traffic Analysis		
TAC	Toxic Air Contaminant		
TAZ	traffic analysis zone		
TCR	tribal cultural resources		
TeNS	Technical Noise Supplement		
TISG	Transportation Impact Study Guide		
TMDL	total maximum daily load		
TNM	Traffic Noise Model		
TOD	transit-oriented development		
TOG	total organic gaseous		
UCERF3	Uniform California Earthquake Rupture Forecast		
UDC	Unified Development Code		

Acronym/Abbreviation	Definition
UNFCCC	United Nations Framework Convention on Climate Change
USACE	U.S. Army Corps of Engineers
USDOT	U.S. Department of Transportation
USFWS	U.S. Fish and Wildlife Service
UST	underground storage tank
UWMP	Urban Water Management Plan
VCP	vitrified clay pipe
VdB	Vibration level
VDECS	Verified Diesel Emission Control Strategies
VHFHSZ	Very High Fire Hazard Severity Zone
VMT	vehicle miles traveled
VOC	volatile organic compounds
WDR	waste discharge requirements
WEP	Wildfire Evacuation Plan
WRP	Water Reclamation Plant
WSA	Water Supply Assessment
WUI	wildland urban interface
ZE	zero emission
ZEV	zero-emission vehicle

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1 Executive Summary

This section provides a summary of the Draft Environmental Impact Report (EIR) for the proposed Wiley Canyon Project (project). Included in this summary are areas of known controversy and issues to be resolved, a summary of project alternatives, a summary of all project impacts and associated mitigation measures, and a statement of the ultimate level of significance after mitigation is applied.

1.1 Document Purpose

This Draft EIR was prepared by the City of Santa Clarita (City), as lead agency, to inform decision makers and the public of the potential significant environmental impacts associated with the proposed project. This Draft EIR has been prepared in accordance with the California Environmental Quality Act (CEQA) Statute (California Public Resources Code, Section 21000 et seq.) and Guidelines (14 CCR 15000 et seq.) published by the Public Resources Agency of the State of California.

The purpose of this Draft EIR is to focus the discussion on those potential impacts on the environment of the project that the lead agency has determined may be significant. In addition, feasible mitigation measures are recommended, when applicable, that could reduce or avoid significant environmental impacts.

1.2 Document Organization

This EIR is organized as follows:

Chapter 1, Executive Summary, outlines the conclusions of the environmental analysis and provides a summary of the proposed project and the project alternatives analyzed in the EIR. This section also includes a table summarizing all environmental impacts identified in the EIR along with the associated mitigation measures proposed to reduce or avoid each impact.

Chapter 2, Introduction, serves as a forward to the EIR, introducing the project, the applicable environmental review procedures, and the organization of the EIR.

Chapter 3, Project Description, provides a thorough description of the setting, objectives, characteristics, operation, and construction of the proposed project and required discretionary approvals.

Chapter 4, Environmental Analysis, describes the potential environmental effects of the proposed project, as well as proposed mitigation measures to reduce or avoid any potentially significant impacts. The discussion in Chapter 4 is organized by 18 environmental issue areas as follows:

- Aesthetics
- Air quality
- Biological resources
- Cultural resources
- Energy
- Geology and soils

- Land use and planning
- Mineral resources
- Noise
- Population and housing
- Recreation
- Transportation

- Greenhouse gas emissions
- Hazards and hazardous materials
- Hydrology and water quality

- Tribal cultural resources
- Utilities and service systems
- Wildfire

For each environmental issue area, the analysis and discussion are organized into subsections as described below:

- Environmental Setting This subsection describes the physical environmental conditions in the vicinity of the proposed project at the time of publication of the Notice of Preparation (NOP). The environmental setting establishes the baseline conditions by which the City will determine whether specific project-related impacts are significant.
- Regulatory Framework This subsection describes the laws, regulations, ordinances, plans, and policies
 applicable to the environmental issue area and the proposed project.
- Thresholds of Significance This subsection identifies a set of thresholds by which the level of impact is determined.
- Impact Analysis This subsection provides a detailed analysis regarding the environmental effects of the proposed project and whether the impacts of the proposed project would meet or exceed the thresholds of significance.
- Mitigation Measures This subsection identifies potentially feasible mitigation measures that would avoid
 or substantially reduce significant adverse project impacts.
- Level of Significance After Mitigation This subsection discusses whether project-related impacts would be reduced to below a level of significance with implementation of the mitigation measures identified in the EIR. If applicable, this subsection also identifies any residual significant and unavoidable adverse effects of the proposed project that would result even with implementation of any feasible mitigation measures.

In addition to the subsections listed above, full citations for all documents referred to in each environmental issue area discussion are included at the end of each section or chapter.

Chapter 5, Other CEQA Requirements, addresses significant environmental effects that cannot be avoided, the significant irreversible environmental changes that would result from implementation of the proposed project, growth-inducing impacts associated with the proposed project, and potential secondary effects of mitigation measures included for the proposed project.

Chapter 6, Alternatives, discusses alternatives to the proposed project, including a No Project Alternative. This chapter describes the rationale for selecting the range of alternatives discussed in the EIR and identifies the alternatives considered by the City that were rejected from further discussion as infeasible during the scoping process. Lastly, Chapter 7 includes a discussion of the environmental effects of the alternatives that were carried forward for analysis and identifies the environmentally superior alternative.

Chapter 7, List of Preparers, gives names and contact information of those responsible for writing this EIR.

Appendices include various technical studies prepared for the proposed project, as listed in the Table of Contents.

1.3 Project Location

The project site consists of approximately 31.8 acres of vacant land located at 24924 Hawkbryn Avenue, bordered by Interstate 5 (I-5) to the west, Wiley Canyon Road to the east, Hawkbryn Avenue to the north and Calgrove Boulevard to the south, within the Newhall area of the City of Santa Clarita (City), as shown in Figure 3-1, Project Location. The project site is located approximately 28 miles northwest of downtown Los Angeles and is locally accessible via Wiley Canyon Road and Hawkbryn Avenue. Regionally, the project site is accessible from the I-5 freeway via Calgrove Boulevard, south of the site, or via Lyons Avenue approximately 0.6 miles north of the site. The project site is located entirely within the City's jurisdictional boundaries, and unincorporated Los Angeles County is located immediately west of the I-5 freeway.

The project site consists of the following Assessor Parcel Numbers (APNs): 2825-012-007, 2825-012-010, 2825-012-011, 2825-012-901, and 2825-012-902. Specifically, the project site is located in Township 3 North, Range 16 West, Sections 4, 9 and 10, as shown on the U.S. Geological Survey 7.5-minute Oat Mountain Quadrangle topographic map.

1.4 Project Description

1.4.1 Project Overview

The proposed project would result in the creation of seven separate lots (ranging in size from 31,011 square feet to 356,007 square feet) and the redevelopment of existing vacant land with a new mixed-use development consisting of the following components, as shown in Figure 3-3, Site Development Plan: a 277,108 square-foot senior living facility, 8,914 square feet of commercial space, 379 multifamily residential apartments, a publicly accessible outdoor recreational field space, and off-site circulation improvements (e.g., new roundabouts, traffic signals, Class I, II, and III bike lanes on Wiley Canyon Road and Calgrove Boulevard, and pedestrian trails).

1.4.2 Project Objectives

The primary objectives of the proposed project include the following:

- Create a new mixed-use community that allows for residential, retail/commercial, and senior housing while
 preserving and enhancing natural resources.
- Provide a sensitive and protective interface with the adjacent Wiley Canyon Creek by utilizing appropriate setback, grading, landscape, buried bank stabilization and water quality treatments.
- Provide development and transitional land use patterns that are compatible with surrounding communities and land uses and are consistent with the City's General Plan.
- Arrange land uses and add amenities to reduce vehicle miles traveled and to encourage the use of transit.
- Design neighborhoods to locate residential and non-residential land uses in close proximity to each other and major road corridors, transit and trails.
- Provide public spaces, including plazas, private and public recreational areas and trails.
- Implement waste reduction, drought-tolerant landscaping, and use of water efficiency measures.
- Provide a trail with public access along Wiley Canyon Road and within the project site along Wiley Canyon Creek.

- Provide a landscape design emphasizing a pleasant neighborhood character and inviting streetscapes.
- Enhance and augment the City's housing market by providing a variety of housing product to meet the needs of future residents.
- Maintain and enhance the use of Wiley Canyon Creek with native revegetation as a to serve as a natural channel to be utilized by wildlife.
- Incorporate new oak trees into the project design, including public spaces.
- Incorporate vehicle and pedestrian circulation improvements on Wiley Canyon Road and Calgrove Boulevard through the widening of the roadways where needed, as well as the addition of appropriate traffic controls at various intersections.
- Provide a Class I trail and sidewalks along the roadways.
- Provide publicly accessible passive and active recreational opportunities for prospective residents and existing residents in proximity to the project site.
- Include amenities to specifically support senior residents requiring senior services including memory care, supporting amenities for basic-needs nursing care, and housekeeping service.
- Include recreational amenities to improve quality of life of prospective on-site residents and existing off-site
 residents and encourage senior living tenants to socialize and maintain active lifestyles.

1.5 Areas of Known Controversy

In accordance with the CEQA Guidelines, an NOP was distributed on March 24, 2022, to public agencies, organizations, and interested individuals. The purpose of the NOP was to provide notification that the City planned to prepare an EIR and to solicit input on the scope and content of the EIR. Approximately 51 copies of the NOP were distributed and over 50 written comment letters were received from various agencies, organizations, and individuals. These letters and the NOP are included in Appendix A.

A scoping meeting was held at the City of Santa Clarita City Hall on April 14, 2022. The purpose of this meeting was to seek input from public agencies and the general public regarding the potential environmental impacts of the proposed project. Approximately 58 people attended the scoping meeting. The public comments, questions, and concerns that were received at the scoping meeting generally included the following areas:

- Aesthetics changes to existing visual character and nighttime lighting
- Air quality emissions during construction and from operational traffic
- Biological resources disruption in animal travel patterns, nighttime lighting impacts to wildlife movement, impacts to sensitive wildlife and vegetation, loss of oak trees
- Hazards and hazardous materials wildland fire, emergency evacuation routes becoming jammed
- Hydrology and water quality water quality conditions beneath the site
- Land use and planning change from Open Space general plan and zoning designations, consistency with the Sand Canyon Special Standards District
- Noise construction noise and noise increases from operational traffic, noise from weddings and events
- Recreation loss of recreational open space
- Transportation event traffic, adequate parking, bicycle/pedestrian safety along Sand Canyon Road, equestrian safety along Sand Canyon Road, emergency evacuation along Sand Canyon Road, cut-through traffic on Sand Canyon Road, traffic on Highway 14, additional/secondary access to the project site

 Wildfire – the project site burned in 2016 during the Sand Fire, and during this fire, residents of Sand Canyon had a difficult time evacuating the community due to congestion along Sand Canyon Road

This EIR focuses on all potential environmental impacts, including the comments received in response to the NOP.

1.6 Required Permits and Approvals

The City is the lead agency for the proposed project pursuant to CEQA Guidelines Section 15367. The proposed project would require a number of permits and approvals by the City, listed as follows:

- Tentative Map to subdivide the project site into six lots
- Grading Permit for up to 44,000 cubic yards of cut and 59,000 cubic yards of fill, and the import of approximately 85,000 cubic yards of fill
- Conditional Use Permit for new development within the Planned Overlay District
- Minor Use Permit for commercial floor area ratio that does not meet the minimum required in the zone, and the import of approximately 85,000 cubic yards of fill
- Development and Architectural Design Review for the development of the proposed project
- Oak Tree Permit for removal of, encroachment upon, and/or impact to existing oak trees
- Environmental Impact Report certification as required by the California Environmental Quality Act
- Clean Water Act Section 404 Permit from the U.S. Army Corps of Engineers (USACE) (if jurisdictional aquatic resources are impacted)
- Clean Water Act Section 401 Water Quality Certification from the Los Angeles Regional Water Quality Control Board (RWQCB) (if jurisdictional aquatic resources are impacted)
- Streambed Alteration Agreement from the California Department of Fish and Wildlife (CDFW) pursuant to California Fish and Game Code Section 1602 (if jurisdictional aquatic resources are impacted)

Summary of Environmental Impacts and Mitigation Measures

Table 1-1 provides a summary of the impact analysis related to the project. Table 1-1 identifies a summary of the significant environmental impacts resulting from the project pursuant to the CEQA Guidelines Section 15123(b)(1). For more detailed discussion, please see Chapter 4 of this Draft EIR. Table 1-1 lists the applicable mitigation measures related to potentially significant impacts, as well as the level of significance after mitigation.

Table 1-1. Summary of Project Impacts

Environmental Topic	Impact?	Mitigation Measure(s)	Level of Significance After Mitigation
Aesthetics			
AES-1. Would the project have a substantial adverse effect on a scenic vista?	Less than Significant	N/A	N/A
AES-2. Would the project substantially damage scenic resources, including, but not limited to trees, rock outcroppings, and historic buildings within a state scenic highway?	Less than Significant	N/A	N/A
AES-3. Would the project, 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 points.) In the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	Less than Significant	N/A	N/A
AES-4. Would the project create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	Less than Significant	N/A	N/A
AES-5. Would the project result in changes to the topography of a Primary or Secondary Ridgeline?	No Impact	N/A	N/A
Air Quality			
AQ-1. Would the project conflict with or obstruct implementation of the applicable air quality plan?	Less than Significant	N/A	N/A
AQ-2. Would the project result in a cumulatively considerable new increase of any criteria pollutant for which the project region is non-attainment under an	Potentially Significant	MM-AQ-1. Construction Equipment Features The project shall utilize off-road diesel-powered construction equipment that meets or exceeds the California Air Resources Board (CARB) and U.S.	Less than Significant

Table 1-1. Summary of Project Impacts

Environmental Topic	Impact?	Mitigation Measure(s)	Level of Significance After Mitigation
applicable federal or state ambient air quality standard?		Environmental Protection Agency (USEPA) Tier 4 Final off-road emissions standards or equivalent for equipment rated at 50 horsepower (hp) or greater during project construction where available within the Los Angeles region. Such equipment shall be outfitted with Best Available Control Technology (BACT), which means a CARB-certified Level 3 diesel particulate filter (DPF) or equivalent.	
AQ-3. Would the project expose sensitive receptors to substantial pollutant concentrations?	Potentially Significant	See MM-AQ-1 above.	Less than Significant
AQ-4. Would the project result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	Less than Significant	N/A	N/A
AQ-5. Would the project exceed the most recent air quality thresholds as determined by the South Coast Air Quality Management District, as published in its "Air Quality Analysis Guidance Handbook"?	Potentially Significant	See MM-AQ-1 above.	Less than Significant
Biological Resources			
BIO-1. Would the project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	Potentially Significant	A pre-construction survey for Crotch bumble bee must be conducted within the construction footprint before starting of initial vegetation removal or initial grading activities occurring during the Crotch bumble bee nesting period (February 1 through October 31). The survey must confirm that no nests/hives for Crotch bumble bee are located within the construction area. The pre-construction survey must include 1) a habitat assessment and 2) focused surveys, both of which will be based on recommendations described in the "Survey"	Less than Significant

Table 1-1. Summary of Project Impacts

Environmental Topic	Impact?	Mitigation Measure(s)	Level of Significance After Mitigation
		Considerations for California Endangered Species Act (CESA) Candidate Bumble Bee Species," released by the California Department of Fish and Wildlife (CDFW) on June 6, 2023, or the most current at the time of construction.	
		The habitat assessment must, at a minimum, include historical and current species occurrences; document potential habitat onsite including foraging, nesting, and/or overwintering resources; and identify which plant species are present. For the purposes of this mitigation measure, nest resources are defined as abandoned small mammal burrows, bunch grasses with a duff layer, thatch, hollow trees, brush piles, and man-made structures that may support bumble bee colonies such as rock walls, rubble, and furniture. If nesting resources are present in the impact area, focused surveys will be conducted.	
		The focused survey will be performed by a biologist with expertise in surveying for bumble bees and include at least three survey passes that are not on sequential days or in the same week, preferably spaced two to four weeks apart. The timing of these surveys must coincide with the Colony Active Period (April 1 through August 31 for Crotch bumble bee). Surveys may occur between one hour after sunrise and two hours before sunset. Surveys will not be conducted during wet conditions (e.g., foggy, raining, or drizzling) and surveyors will wait at least one hour following rain. Optimal surveys are when there are sunny to partly sunny skies that are greater than 60° Fahrenheit. Surveys may be conducted earlier if other bees or butterflies are flying. Surveys may not	
		be conducted when it is windy (i.e., sustained winds greater than 8 mph). Within non-developed habitats,	

Table 1-1. Summary of Project Impacts

Environmental Topic	Impact?	Mitigation Measure(s)	Level of Significance After Mitigation
		the biologist must look for nest/hive resources suitable for bumble bee use. Ensuring that all nest resources receive 100% visual coverage, the biologist must watch the nest resources for up to five minutes, looking for exiting or entering worker bumble bees. Worker bees should arrive and exit an active nest site with frequency, such that their presence would be apparent after five minutes of observation. If a bumble bee worker is detected, then a representative individual must be identified to species to determine if it is Crotch bumble bee or one of the common, unregulated species. Biologists should be able to view several burrows at one time to sufficiently determine if bees are entering/exiting them depending on their proximity to one another. It is up to the discretion of the biologist regarding the actual survey viewshed limits from the chosen vantage point which would provide 100% visual coverage; this could include a 30- to 50-foot-wide area. If a nest is suspected, the surveyor can block the entrance of the possible nest with a sterile vial or jar until nest activity is confirmed (no longer than 30 minutes).	
		Identification will include trained biologists netting/capturing the representative bumble bee in appropriate insect nets, per the protocol in U.S. National Protocol Framework for the Inventory and Monitoring of Bees. The bee must be placed in a clear container for observation and photographic documentation if able. The bee will be photographed using a macro lens from various angles to ensure recordation of key identifying characteristics. If bumble bee identifying characteristics cannot be adequately captured in the container due to	

Table 1-1. Summary of Project Impacts

Environmental Topic	Impact?	Mitigation Measure(s)	Level of Significance After Mitigation
		movement, the container will be placed in a cooler with ice until the bumble bee becomes inactive (generally within 15 minutes). Once inert, the bumble bee must be removed from the container and placed on a white sheet of paper or card for examination and photographic documentation. Based on implementation of this method on a variety of other bumble bee species, they become active shortly after removal from the cold environment, so photography must be performed quickly. The bumble bee must be released into the same area from which it was captured upon completion of identification.	
		If Crotch bumble bee nests are not detected, no further mitigation is required, and no additional surveys would be needed if construction begins within 14 days of the last survey for a given phase area. If construction in a given phase area does not start within 14 days of the last survey, or if construction in a given phase area stops for 14 days or longer, surveys would be repeated if construction re-commences between February 1 and October 31.	
		The mere presence of foraging Crotch bumble bees would not require implementation of additional minimization measures because they can forage up to 10 kilometers from their nests. If nest resources occupied by Crotch bumble bee are detected within the construction area, no construction activities can occur within 100 feet of the nest, or as determined by a qualified biologist through evaluation of topographic features or distribution of floral resources. The nest resources will be avoided for the duration of the Crotch bumble bee nesting period (February 1 through October 31). Outside of the	

Table 1-1. Summary of Project Impacts

			Level of Significance
Environmental Topic	Impact?	nesting season, it is assumed that no live individuals would be present within the nest as the daughter queens (gynes) usually leave by September, and all other individuals (original queen, workers, males) die. The gyne is highly mobile and can independently disperse to outside of the construction footprint to surrounding open space areas that support suitable hibernacula resources.	After Mitigation
		A written survey report will be submitted to the City and CDFW within 30 days of the pre-construction survey. The report will include survey methods, weather conditions, and survey results, including a list of insect species observed and a figure showing the locations of any Crotch bumble bee nest sites or individuals observed. The survey report will include the qualifications/resumes of the surveyor(s) and approved biologist(s) for identification of photo vouchers, detailed habitat assessment, and photo vouchers. If Crotch bumble bee nests are observed, the survey report must also include recommendations for avoidance, and the location information will be submitted to the California Natural Diversity Database (CNDDB) at the time of, or before, submittal of the survey report.	
		If the above measures are followed, it is assumed that the project need not to obtain authorization from CDFW through the California Endangered Species Act Incidental Take Permit process. If the nest resources cannot be avoided during the nesting period, as outlined in this measure, the project applicant will consult with CDFW regarding the need to obtain an Incidental Take Permit. Any measures determined to be necessary through the Incidental Take Permit process to offset impacts to Crotch	

Table 1-1. Summary of Project Impacts

Environmental Topic	Impact?	Mitigation Measure(s)	Level of Significance After Mitigation
		bumble bee may supersede measures provided in this CEQA document.	
		In the event an Incidental Take Permit is needed, mitigation for direct impacts to Crotch bumble bee will be fulfilled through compensatory mitigation at a minimum 1:1 nesting habitat replacement of equal or better functions and values to those impacted by the project, or as otherwise determined through the Incidental Take Permit process. Mitigation will be accomplished either through off-site conservation or through a CDFW-approved mitigation bank. If mitigation is not purchased through a mitigation bank, and lands are conserved separately, a cost estimate will be prepared to estimate the initial start-up costs and ongoing annual costs of management activities for the management of the conservation easement area(s) in perpetuity. The funding source will be in the form of an endowment to help the qualified natural lands management entity that is ultimately selected to hold the conservation easement(s). The endowment amount will be established following the completion of a project-specific Property Analysis Record to calculate the costs of in-perpetuity land management. The Property Analysis Record will take into account all management activities required in the Incidental Take Permit to fulfill the requirements of the conservation easement(s), which are currently in review and development.	
		MM-BIO-2. Least Bell's Vireo	
		Before starting construction, a qualified biologist must conduct eight focused surveys within suitable least Bell's vireo habitat between April 10 and July	

Table 1-1. Summary of Project Impacts

Environmental Topic	Impact?	Mitigation Measure(s)	Level of Significance After Mitigation
		31, and be spaced a minimum of 10 days apart, in accordance with the 2001 United State Fish and Wildlife Service (USFWS) Least Bell's Vireo Survey Guidelines. The eight focused protocol surveys must be completed, and the results of the surveys be submitted in a draft report to the City for review within 21 days of the completion of surveys. A final report must be prepared and submitted to the City and USFWS within 45 days following the completion of the surveys. If least Bell's vireo is determined to be absent, no further action is required.	
		If least Bell's vireo is determined to be present based on the results of the protocol surveys, no construction may begin before consulting with California Department of Fish and Wildlife (CDFW) and USFWS for compliance with both the federal and State endangered species acts. Compensatory mitigation for impacts to 0.78 acre of marginally suitable least Bell's vireo habitat must be achieved in conjunction with Mitigation Measure BIO-4 for impacts to a jurisdictional drainage with mitigation ratio of at least 2:1.	
		MM-BIO-3. Nesting Birds	
		Before construction that would require removal of potential habitat for raptor and songbird nests between January 15 and September 1, the Project applicant must have a qualified biologist that is approved by the City conduct surveys for any and all active avian nests. Pre-construction nesting bird surveys must be conducted weekly, within 30 days before initiation of ground-disturbing activities to determine the presence of active nests. The surveys should?? continue on a weekly basis with the last	

Table 1-1. Summary of Project Impacts

Environmental Topic	Impact?	Mitigation Measure(s)	Level of Significance After Mitigation
		survey being conducted not more than three days before the start of clearance/construction work. Surveys should include examination of trees, shrubs, and the ground, within grasslands, for nesting birds, as several bird species known to the area are shrub or ground nesters, including mourning doves. If ground-disturbing activities are delayed, additional preconstruction surveys may be recommended by the City so that not more than three days elapse between the survey and ground-disturbing activities. If active nests are located during pre-construction surveys, clearing and construction activities within 300 feet of the nest (500 feet for raptors) must be	
		postponed or halted until the nest is vacated and juveniles have fledged, as determined by the biologist, and there is no evidence of a second attempt at nesting. Limits of construction to avoid an active nest must be established in the field with flagging, fencing, or other appropriate barriers and construction personnel should be instructed on the sensitivity of nest areas. The nest buffers may be reduced by the monitoring biologist when there is a biologist present to observe the nest for changes in behavior. The biologist must serve as a construction	
		monitor during those periods when construction activities will occur near active nest areas to ensure that no inadvertent impacts on these nests will occur. It is recommended?? that the results of the survey, and any avoidance measures taken, be submitted to the City within 30 days of completion of the pre-construction surveys and/or construction monitoring to document compliance with applicable state and federal laws pertaining to the protection of native birds.	

Table 1-1. Summary of Project Impacts

Environmental Topic	Impact?	Mitigation Measure(s)	Level of Significance After Mitigation
BIO-2. Would the project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	Potentially Significant	MM-BIO-4. Sensitive Plan Communities Before the Building Official issues a grading permit, impacts to sensitive plant communities (e.g., Fremont cottonwood/mulefat forest, Fremont cottonwood forest, and California sycamore woodland) must be mitigated through enhancement or restoration of remaining on-site sensitive plant communities at a ratio of 1:1 or the creation of new sensitive plant communities within the newly created channel area. A habitat mitigation and monitoring plan must be prepared by a City-approved biologist or restoration ecologist and approved by the City before the Public Works Director, or designee, issues a grading permit. The mitigation and monitoring plan must focus on the removal of nonnative elements within disturbed habitat areas of the project site or depict creation areas, planting/restoration methods and success criteria. In addition, this plan must provide details as to its implementation, maintenance, and future monitoring including the following components: Description of existing sensitive plant communities on the Project site; Summary of permanent impacts to the sensitive community based on approved Project design; Proposed mitigation location areas, with description of existing conditions prior to mitigation implementation; Detailed description of restoration or enhancement goals; Description of implementation schedule, site preparation, erosion control measures, planting plans, and plant materials;	Less than Significant

Table 1-1. Summary of Project Impacts

Environmental Topic	Impact?	Mitigation Measure(s)	Level of Significance After Mitigation
		 Provisions for mitigation site maintenance and control on non-native invasive plants; and Monitoring plan, including performance standards, adaptive management measures, and Monitoring reporting to the City of Santa Clarita 	
		Alternatively, mitigation for sensitive plant community impacts may be achieved through off-site restoration or enhancement at a ratio no less than 1:1 and may include the purchase of mitigation credits at an agency- approved off-site mitigation bank or an in-lieu fee program within Los Angeles County acceptable to the City.	
BIO-3. Would the project have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	Potentially Significant	MM-BIO-5. Jurisdictional Aquatic Resources Before the Public Works Director, or designee, issues any grading permit for permanent or temporary impacts in the areas designated as jurisdictional features, the applicant must obtain a Clean Water Act Section 404 permit from the United States Army Corps of Engineers (USACE), a Clean Water Act Section 401 permit from the Regional Water Quality Control Board (RWQCB), and Streambed Alteration Agreement permit under Fish and Game Code Section 1602 from the California Department of Fish and Wildlife (CDFW). The following shall be incorporated into the permitting, subject to approval by the regulatory agencies:	Less than Significant
		 On- or off-site restoration or enhancement of USACE/RWQCB jurisdictional "waters of the U.S."/"waters of the State" and wetlands at a ratio no less than 2:1 for permanent impacts, and for temporary impacts, restore impact area to pre-project conditions (i.e., revegetate with 	

Table 1-1. Summary of Project Impacts

Environmental Topic	Impact?	Mitigation Measure(s)	Level of Significance After Mitigation
		native species, where appropriate). Off-site restoration or enhancement at a ratio no less than 2:1 may include the purchase of mitigation credits at an agency-approved off-site mitigation bank or in lieu fee program within Los Angeles County or within the same watershed acceptable to the City, where the location has comparable ecological parameters such as habitat types and species mix; On- or off-site restoration or enhancement of CDFW jurisdictional streambed and associated riparian habitat at a ratio no less than 2:1 for permanent impacts, and for temporary impacts, restore impact area to pre-project conditions (i.e., revegetate with native species, where appropriate). Off-site restoration or enhancement at a ratio no less than 2:1 may include the purchase of mitigation credits at an agency-approved off-site mitigation bank or inlieu fee program within Los Angeles County or within the same watershed acceptable to the City, here the location has comparable ecological parameters such as habitat types and species mix.	
BIO-4. Would the project 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?	Potentially Significant	See MM-BIO-3 above.	Less than Significant
BIO-5. Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	Less than Significant	N/A	Less than Significant

Table 1-1. Summary of Project Impacts

Environmental Topic	Impact?	Mitigation Measure(s)	Level of Significance After Mitigation
BIO-6. Would the project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	No Impact	N/A	N/A
BIO-7. Removal of any heritage oak tree, as defined in Uniform Development Code §17.16.090, removal of more than five (5) oak trees for a project on a site that has an existing single-family residence, or the removal of more than three (3) oak trees, proposed as part of any other project.	Less than Significant	N/A	N/A
BIO-8. Disturbance of, or encroachment into, any river, river tributary, riparian habitat, stream or similar waterway identified on a United States Geological Survey map as a "blue-line" watercourse, or any waterway otherwise identified as a significant resource by the City of Santa Clarita.	Potentially Significant	See MM-BIO-5 above.	Less than Significant
BIO-9. Disturbance of any habitat known or suspected to contain a plant or animal species listed as endangered on such Federal and/or State lists.	Potentially Significant	See MM-BIO-1 through MM-BIO-3 above.	Less than Significant
Cultural Resources			
CUL-1. Would the project cause a substantial adverse change in the significance of a historical resource pursuant to CEQA Guidelines Section 15064.5?	Potentially Significant	MM-CUL-1. Retention of a Qualified Archaeologist Before the Public Works Director, or designee, issues grading permit and before starting any ground-disturbing activity, the applicant must retain a qualified archaeologist, defined as one meeting the Secretary of the Interior's Professional Qualification Standards for archeology (U.S. Department of Interior 2012) to carry out all	Less than Significant

Table 1-1. Summary of Project Impacts

Environmental Topic	Impact?	Mitigation Measure(s)	Level of Significance After Mitigation
		mitigation measures related to archeological resources.	
		MM-CUL-2. Cultural Resources Sensitivity Training	
		Before starting ground-disturbing activities, the qualified archaeologist must conduct cultural resources sensitivity training for all construction personnel. Construction personnel will be informed of the types of archaeological resources that may be encountered, and of the proper procedures to be enacted in the event of an inadvertent discovery of archaeological resources or human remains. The applicant must ensure that construction personnel attend the training and retain documentation demonstrating attendance.	
		MM-CUL-3. Archaeological and Native American Monitoring.	
		An archaeological monitor (working under the direct supervision of the qualified archaeologist) and a Native American monitor must be present during all ground-disturbing activities within areas of the Project mapped as containing Holocene-age undifferentiated alluvium. The qualified archaeologist, in coordination with the City's Project Manager, may reduce or discontinue monitoring if it is determined that the possibility of encountering buried archaeological deposits is low based on observations of soil stratigraphy or other factors. Archaeological monitoring must be conducted by an archaeologist familiar with the types of archaeological resources that could be encountered within the Project area. The Native American monitor must be selected from the Native American groups identified by the Native American Heritage	

Table 1-1. Summary of Project Impacts

Mitigation Measure(s) Commission (NAHC) as having affiliation with the Project area. The archaeological monitor and Native American monitor are empowered to halt or redirect ground-disturbing activities away from the vicinity of a discovery until the qualified archaeologist has evaluated the discovery and determined appropriate treatment. The archaeological monitor must keep daily logs detailing the types of activities and soils observed, and any discoveries. After monitoring is completed, the qualified archaeologist must prepare a monitoring report that details the results of monitoring. The report must be submitted to the City	
Commission (NAHC) as having affiliation with the Project area. The archaeological monitor and Native American monitor are empowered to halt or redirect ground-disturbing activities away from the vicinity of a discovery until the qualified archaeologist has evaluated the discovery and determined appropriate treatment. The archaeological monitor must keep daily logs detailing the types of activities and soils observed, and any discoveries. After monitoring is completed, the qualified archaeologist must prepare a monitoring report that details the results of monitoring. The report must be submitted to the City	
and any Native American groups who request a copy. A copy of the final report must be filed at the SCCIC.	
MM-CUL-4. Archaeological and NativeAmerican Monitoring	
Should unanticipated discovery of archaeological materials occur, the contractor must immediately cease all work activities in the area (within approximately 100 feet) of the discovery until it can be evaluated by a qualified archaeologist. Prehistoric archaeological materials might include obsidian and chert flaked-stone tools (e.g., projectile points, knives, scrapers) or tool-making debris; culturally darkened soil ("midden") containing heat-affected rocks, artifacts, or shellfish remains; stone milling equipment (e.g., mortars, pestles, handstones, or milling slabs); and battered stone tools, such as hammerstones and pitted stones. Historic-period materials might include stone or concrete footings and walls; filled wells or privies; and deposits of	
	Monitoring Should unanticipated discovery of archaeological materials occur, the contractor must immediately cease all work activities in the area (within approximately 100 feet) of the discovery until it can be evaluated by a qualified archaeologist. Prehistoric archaeological materials might include obsidian and chert flaked-stone tools (e.g., projectile points, knives, scrapers) or tool-making debris; culturally darkened soil ("midden") containing heat-affected rocks, artifacts, or shellfish remains; stone milling equipment (e.g., mortars, pestles, handstones, or milling slabs); and battered stone tools, such as hammerstones and pitted stones. Historic-period materials might include stone or concrete footings

Table 1-1. Summary of Project Impacts

Environmental Topic	Impact?	Mitigation Measure(s)	Level of Significance After Mitigation
		conferred with the City's Project Manager on the significance of the resource.	
		If it is determined by the qualified archaeological monitor that the discovered archaeological resource constitutes a historical resource or unique archaeological resource under CEQA, avoidance and preservation in place is the preferred manner of mitigation. Preservation in place maintains the important relationship between artifacts and their archaeological context and also serves to avoid conflict with traditional and religious values of groups who may ascribe meaning to the resource. Preservation in place may be accomplished by, but is not limited to, avoidance, incorporating the resource into open space, capping, or deeding the site into a permanent conservation easement. In the event that preservation in place is demonstrated to be infeasible and data recovery through excavation is the only feasible mitigation available, an Archaeological Resources Data Recovery and Treatment Plan shall be prepared and implemented by the qualified archaeologist in consultation with the City that provides for the adequate recovery of the scientifically consequential information contained in the archaeological resource. The qualified archaeologist and City's Project Manager must consult with appropriate Native American representatives in determining treatment for prehistoric or Native American resources to ensure cultural values ascribed to the resource, beyond those that are scientifically important, are considered.	

Table 1-1. Summary of Project Impacts

Environmental Topic	Impact?	Mitigation Measure(s)	Level of Significance After Mitigation
CUL-2. Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines Section 15064.5?	Potentially Significant	See MM-CUL-1, MM-CUL-2, MM-CUL-3, and MM-CUL-4 above.	Less than Significant
CUL-3. Would the project disturb any human remains, including those interred outside of formal cemeteries?	Potentially Significant	MM-CUL-5. Inadvertent Discovery of Human Remains If human remains are encountered, the contractor must halt work in the vicinity (within 100 feet) of the discovery and contact the Los Angeles County Coroner in accordance with Public Resources Code (PRC) section 5097.98 and Health and Safety Code section 7050.5. The City's Project Manager must also be notified. If the County Coroner determines the remains are Native American, the Native American Heritage Commission NAHC must be notified in accordance with Health and Safety Code section 7050.5(c) and PRC Section 5097.98. The NAHC will designate a most likely descendent (MLD) for the remains per PRC section 5097.98. Until the landowner has conferred with the MLD, the contractor must ensure that the immediate vicinity where the discovery occurred is not disturbed by further activity, is adequately protected according to generally accepted cultural or archaeological standards or practices, and that further activities take into account the possibility of multiple burials.	Less than Significant
Energy			
ENG-1. Would the project result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	Less than Significant	N/A	N/A

Table 1-1. Summary of Project Impacts

Environmental Topic	Impact?	Mitigation Measure(s)	Level of Significance After Mitigation
ENG-2. Would the project conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	Less than Significant	N/A	N/A
ENG-3. Would the project result in a cumulatively considerable energy impact?	Less than Significant	N/A	N/A
Geology and Soils			
GEO-1. Would the project directly or indirectly	cause potential substan	tial 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?	No Impact	N/A	N/A
ii. Strong seismic ground shaking	Less than Significant	N/A	N/A
iii. Seismic-related ground failure, including liquefaction	Less than Significant	N/A	N/A
iv. Landslides	Less than Significant	N/A	N/A
GEO-2. Would the project result in substantial soil erosion or the loss of topsoil?	Less than Significant	N/A	N/A
GEO-3. Would the project be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or offsite landslide, lateral spreading, subsidence, liquefaction or collapse?	Less than Significant	N/A	N/A
GEO-4. Would the project be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?	Less than Significant	N/A	N/A

Table 1-1. Summary of Project Impacts

Environmental Topic	Impact?	Mitigation Measure(s)	Level of Significance After Mitigation
GEO-5. Would the project have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	No Impact	N/A	N/A
GEO-6. Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	Potentially Significant	MM-GEO-1. Paleontological Resources Monitoring Retain Qualified Paleontologist. Before starting construction activities, the developer must retain a Qualified Paleontologist that meets the standards of the Society for Vertebrate Paleontology (SVP) (2010) to carry out all mitigation measures related to paleontological resources.	Less than Significant
		MM-GEO-2. Paleontological Resources Sensitivity Training	
		Before any person commences ground disturbing activities, the Qualified Paleontologist must conduct pre-construction worker paleontological resources sensitivity training. The training must include information on what types of paleontological resources could be encountered during excavations, what to do in case an unanticipated discovery is made by a worker, and laws protecting paleontological resources. All construction personnel must be informed of the possibility of encountering fossils and instructed to immediately inform the construction foreman or supervisor if any bones or other potential fossils are unexpectedly unearthed in an area where a paleontological monitor is not present. The developer must ensure that construction personnel are made available for and attend the training and retain documentation demonstrating attendance.	

Table 1-1. Summary of Project Impacts

Environmental Topic	Impact?	Mitigation Measure(s)	Level of Significance After Mitigation
		MM-GEO-3. Paleontological Monitoring	
		The Qualified Paleontologist must supervise a paleontological monitor meeting the SVP standards (2010) and be present during all excavations extending beyond a depth of 5 feet. Monitoring must consist of visually inspecting fresh exposures of rock for larger fossil remains and, where appropriate, collecting wet or dry screened standard sediment samples (up to 4.0 cubic yards) of promising horizons for smaller fossil remains (SVP, 2010). Per the SVP standards (2010), once 50 percent of excavations or other ground disturbing activities are complete within geologic units assigned high paleontological sensitivity and no fossils are identified, monitoring can be reduced to part-time inspections or ceased entirely if determined adequate by the Qualified Paleontologist in consultation with the City's Project Manager. Monitoring activities must be documented in a Paleontological Resources Monitoring Report to be prepared by the Qualified Paleontologist at the completion of construction and be provided to the City within six months of Project completion. If fossil resources are identified during monitoring, the report will also be filed with the Natural History	
		Museum of Los Angeles County.	
		MM-GEO-4. Inadvertent Discoveries	
		If a paleontological resource is discovered during construction, the paleontological monitor is empowered to temporarily divert or redirect grading and excavation activities in the area of the exposed resource to facilitate evaluation of the discovery. An appropriate buffer area must be established by the	

Table 1-1. Summary of Project Impacts

Environmental Topic	Impact?	Mitigation Measure(s)	Level of Significance After Mitigation
		Qualified Paleontologist around the find where construction activities shall not be allowed to continue. Work may be allowed to continue outside of the buffer area. At the Qualified Paleontologist's discretion and to reduce any construction delay, the grading and excavation contractor must assist in removing rock samples for initial processing and evaluation of the find. All significant fossils must be collected by the paleontological monitor and/or the Qualified Paleontologist. Collected fossils must be prepared to the point of identification and catalogued before they are submitted to their final repository. Any fossils collected must be curated at a public, non-profit institution with a research interest in the materials, such as the Natural History Museum of Los Angeles County, if such an institution agrees to accept the fossils. If no institution accepts the fossil collection, they may be donated to a local school in the area for educational purposes. Accompanying notes, maps, and photographs must also be filed at the repository and/or school.	
Greenhouse Gas Emissions			
GHG-1. Would the project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	Less than Significant	N/A	N/A
GHG-2. Would the project conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	Less than Significant	N/A	N/A

Table 1-1. Summary of Project Impacts

Environmental Topic	Impact?	Mitigation Measure(s)	Level of Significance After Mitigation			
Hazards and Hazardous Materials						
HAZ-1. Would the project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	Less than Significant	N/A	N/A			
HAZ-2. Would the project create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	Less than Significant	N/A	N/A			
HAZ-3. Would the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	Less than Significant	N/A	N/A			
HAZ-4. Would the project be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as result, would is create a significant hazard to the public or the environment?	Less than Significant	N/A	N/A			
HAZ-5. For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	No Impact	N/A	N/A			
HAZ-6. Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	Less than Significant	N/A	N/A			

Table 1-1. Summary of Project Impacts

Environmental Topic	Impact?	Mitigation Measure(s)	Level of Significance After Mitigation
HAZ-7. Would the project expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?	Potentially Significant	See MM-CUL-1 through MM-CUL-3 below.	Less than Significant
Hydrology and Water Quality			
HYD-1. Would the project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?	Less than Significant	N/A	N/A
HYD-2. Would the project substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project would impede sustainable groundwater management of the basin?	Less than Significant	N/A	N/A
HYD-3. Would the project substantially alter the or river, or through the addition of impervious		ern of the site or area, including through the alteration o hich would:	f the course of a stream
i. Result in substantial erosion or siltation on- or off-site?	Less than Significant	N/A	N/A
ii. Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite?	Less than Significant	N/A	N/A
iii. Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	Less than Significant	N/A	N/A
iv. Impede or redirect flood flows?	Potentially Significant	MM-HYD-1.	Less than Significant
		The applicant must submit an application for a Letter of Map Revision (LOMR) from the Federal Emergency Management Agency (FEMA) along with a	

Table 1-1. Summary of Project Impacts

Environmental Topic	Impact?	Mitigation Measure(s)	Level of Significance After Mitigation
		hydrology and hydraulics report prepared by a California licensed engineer. The LOMR must be based on the implementation of all physical measures that affect the hydrologic or hydraulic characteristics of the flooding source for the site that are to be included as part of the project before obtaining a building permit. The hydrologic and hydraulics report must demonstrate how modification of the existing regulatory floodway or the Special Flood Hazard Area for the project site will reduce flooding risks to within FEMA requirements. Once the LOMR is approved by FEMA and revises the Flood Insurance Rates Map or Flood Boundary and Floodway Map for the project site, construction of the proposed project may commence in accordance with applicable law.	
HYD-4. Would the project, in a flood hazard, tsunami, or seiche zone, risk release of pollutants due to project inundation?	Potentially Significant	See MM-HYD-1 above.	Less than Significant
HYD-5. Would the project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	Less than Significant	N/A	N/A
Land Use and Planning			
LU-1. Would the project physically divide an established community?	Less than Significant	N/A	N/A
LU-2. Would the project cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	Potentially Significant	See MM-AQ-1, MM-BIO-1 through MM-BIO-5, MM-HYD-1, MM-NOI-1 and MM-NOI-2, and MM-FIRE-1 through MM-FIRE-3 above.	Less than Significant

Table 1-1. Summary of Project Impacts

Environmental Topic	Impact?	Mitigation Measure(s)	Level of Significance After Mitigation				
Mineral Resources							
MIN-1. Would the project result in the loss of availability of a known mineral resource that would be of future value to the region and the residents of the State?	Less than Significant	N/A	N/A				
MIN-2. Would the project result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?	Less than Significant	N/A	N/A				
Noise							
NOI-1. Would project construction occur outside of allowable hours or result in temporary noise levels above 90 dBA at existing vicinity residences?	Potentially Significant	MM-NOI-1. Construction equipment within 200 feet of the northern and eastern boundary of the project site is limited to small, reduced noise equipment that has a maximum noise generation level of 77 dBA Leq at 50 feet. This measure also applies to construction equipment during the later phases of construction for residential buildings within 200 feet of the Senior Living Building after it is occupied.	Significant and Unavoidable (Cumulative)				
		MM-NOI-2.					
		Construction noise barriers must be installed with sufficient height to block the line-of-sight between the project construction area and adjacent sensitive receivers, including proposed on-site residential uses that are completed and occupied while construction in other parts of the project site continues, are recommended during project construction.					

Table 1-1. Summary of Project Impacts

			Level of Significance
Environmental Topic	Impact?	Mitigation Measure(s)	After Mitigation
NOI-2. Would the project result in generation of excessive groundborne vibration or groundborne noise levels?	Less than Significant	N/A	N/A
Population and Housing			
POP-1. Would the project 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)?	Less than Significant	N/A	N/A
POP-2. Would the project displace substantial numbers of people or housing, necessitating the construction of replacement housing elsewhere?	No Impact	N/A	N/A
Recreation			
REC-1. Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	Less than Significant	N/A	N/A
REC-2. Does the project include recreational	Potentially Significant	See MM-AQ-1 above.	Less than Significant
facilities or require the construction or expansion of recreational facilities which		See MM-BIO-1 through MM-BIO-5 above.	
might have an adverse physical effect on		See MM-CUL-1 and MM-CUL-5 above.	
the environment?		See MM-GEO-1 and MM-GEO-4 above.	
		See MM-NOI-1 and MM-NOI-2 above.	
		See MM-FIRE-1 through MM-FIRE-3 above.	
Transportation			
TRA-1. Would the project conflict with a program, plan, ordinance or policy addressing the circulation system, including	Less than Significant	N/A	N/A

Table 1-1. Summary of Project Impacts

Environmental Topic	Impact?	Mitigation Measure(s)	Level of Significance After Mitigation
transit, roadway, bicycle and pedestrian facilities?			
TRA-2. Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?	Less than Significant	N/A	N/A
TRA-3. Would the project substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	Less than Significant	N/A	N/A
TRA-4. Would the project result in inadequate emergency access?	Less than Significant	N/A	N/A

Tribal Cultural Resources

TCR-1. Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:

A. Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k)?	Potentially Significant	See MM-CUL-1 through MM-CUL-5 above.	Less than Significant
B. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe?	Potentially Significant	See MM-CUL-1 through MM-CUL-5 above.	Less than Significant

Table 1-1. Summary of Project Impacts

Environmental Topic	Impact?	Mitigation Measure(s)	Level of Significance After Mitigation			
Utilities and Service Systems						
UTL-1. Would the project 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 would cause significant environmental effects?	Less than Significant	N/A	N/A			
UTL-2. Would the project have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?	Less than Significant	N/A	N/A			
UTL-3. Would the project result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	Less than Significant	N/A	N/A			
UTL-4. Would the project generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	Less than Significant	N/A	N/A			
UTL-5. Would the project comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	Less than Significant	N/A	N/A			

Table 1-1. Summary of Project Impacts

Environmental Topic	Impact?	Mitigation Measure(s)	Level of Significance After Mitigation
Wildfire			
FIRE-1. Would the project substantially impair an adopted emergency response plan or emergency evacuation plan?	Less than Significant	N/A	N/A
FIRE-2. Would the project, 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 wildfire?	Potentially Significant		Less than Significant
FIRE-3. Would the project require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	Potentially Significant	MM-FIRE-1. Extreme Fire Day Ignition Avoidance All construction and maintenance activities must temporarily cease during Red Flag Warnings. The contractor's superintendent must coordinate with personnel to determine which low fire hazard activities may occur. Should the Fire Department declare a Red Flag Warning affecting the Wiley Canyon Project site, the same work activity restrictions occurring during National Weather Service Red Flag Warning periods apply. MM-FIRE-2. Pre-Construction Requirements Vegetation management must be conducted before	Less than Significant
		the start of construction and throughout all construction phases. Perimeter fuel modification must be implemented and approved by the Fire Department before bringing combustible materials on site. Existing flammable vegetation must be reduced by 50% on vacant lots upon commencement of construction. Caution must be used to avoid causing erosion or ground (including slope) instability or water runoff due to vegetation	

Table 1-1. Summary of Project Impacts

Environmental Topic	Impact?	Mitigation Measure(s)	Level of Significance After Mitigation
		removal, vegetation management, maintenance, landscaping or irrigation.	
		Before delivering lumber or combustible materials onto the site, site improvements within the active development area must be in place, including utilities, operable fire hydrants, an approved, temporary roadway surface, and fuel modification zones established. These features must be approved by the Fire Department before combustibles being brought on site.	
		MM-FIRE-3. Pre-Construction Requirements	
		The Fire Department publishes a list of plants that would not contribute to extreme fire behavior are suitable for Fuel Modification Zones. All plants included within fuel modification zones of the proposed project must be from this list and if a minimum distance from structures is stated for the species, such listed species may not be planted closer to any structures associated with the proposed project than the stated minimum distance. No plant that is not listed by the Fire Department on its Fuel Modification Zone Plant Selection Guidelines may be included within a Fuel Modification Zone of the proposed Project without approval by Fire Department.	
FIRE-4. Would the project 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	N/A	N/A

1.8 Summary of Project Alternatives

Section 15126.6 of the CEQA Guidelines identifies the parameters within which consideration and discussion of alternatives to the project should occur. As stated in this section of the Guidelines, alternatives must focus on those that are reasonably feasible and that attain most of the basic objectives of the project. Each alternative should be capable of avoiding or substantially lessening any significant impacts of the project. The rationale for selecting the alternatives to be evaluated and a discussion of the No Project Alternative are also required, per Section 15126.6.

1.8.1 Alternatives Evaluated

This section discusses the alternatives to the project, including the No Project Alternative, under consideration. The No Project (No Development) Alternative, which is a required element of an EIR pursuant to Section 15126.6(e) of the CEQA Guidelines, examines the environmental effects that would occur if the project were not to proceed and no development activities were to occur. The other alternatives are discussed as part of the "reasonable range of alternatives" selected by the lead agency. The following alternatives are addressed in this section, followed by a more detailed discussion of each:

- Alternative 1 No Project/No Build Alternative
- Alternative 2 Affordable Housing Alternative
- Alternative 3 Private Recreational Facility Alternative
- Alternative 4 Construction Noise Setback Alternative

Alternative 1 - No Project/No Build Alternative

Under Alternative 1, development of the project site would not occur as discussed in Chapter 3 of this Draft EIR. While no activity is currently occurring at the project site, it can be reasonably expected that the 75-acre portion of the project site north of Robinson Ranch Road could be re-landscaped and reopen as a golf course, as is currently allowed under existing conditions.

Alternative 2 - Affordable Housing Alternative

Under Alternative 2, the Affordable Housing Alternative, the project site would be developed with 837 multifamily residential apartment units, including 201 units that are reserved for low- and very-low-income households, for an excess of 458 more multifamily apartment units than the proposed project. Additionally, Alternative 2 would provide 1,026 parking spaces, an increase of 83 spaces compared to the proposed project. Under Alternative 2, the recreational areas proposed on the southern portion of the project site would not be developed under this alternative. As such, Alternative 2 would consist of the components shown in Table 1-2.

Alternative 3 - Private Recreational Facility Alternative

Under Alternative 3, a private recreational facility is proposed on the project site. As shown in Figure 6-2, Alternative 3 Site Plan, no buildings/structures are proposed on site with the exception of a 10,000-square foot restaurant bar/clubhouse located on the northwest portion of the site. Publicly accessibly views could show the tennis courts to the north. Views along Wiley Canyon Road may be obstructed by the earth berm and/or vegetation along the creek. Impacts related to scenic vistas and scenic resources within a state scenic highway would be the same as the proposed project. Implementation of this alternative would be subject to the same regulations governing scenic

quality and lighting and glare as the proposed project. However, given that the recreational facility would require overhead lighting, impacts related to lighting and glare would be greater than the proposed project. As such, Alternative 3 would consist of the components shown in Table 1-2.

Alternative 4 – Construction Noise Setback Alternative

Under Alternative 2, the project site would be developed with a 139-bed assisted living facility, 47 detached condos, and 237 apartment units. The proposed senior living facility would be 3-stories in height and the multifamily apartments would range from 2- and 4-stories. Under Alternative 4, a 200-foot open space/landscaped buffer is proposed between the mobile home park to the north and the project site. This alternative would include development of the recreational building and pool located in the center of the project site surrounded by the proposed apartment buildings. In addition, recreational/open space uses are proposed on the southern portion of the site. As shown in Figure 6-3, Alternative 4 Site Plan, the infrastructure improvements, including the northern water quality basin and the southern drainage basin on site are proposed under this alternative as well as off-site street improvements along Wiley Canyon Road and its intersecting streets. As such, Alternative 4 would consist of the components shown in Table 1-2.

1.8.2 Environmentally Superior Alternative

As indicated in Table 1-2, Alternative 1, the No Project Alternative, would result in the least environmental impacts, and therefore would be considered the Environmentally Superior Alternative. However, Section 15126.6(e)(2) of the CEQA Guidelines states that if the Environmentally Superior Alternative is the No Project Alternative, the EIR shall also identify an Environmentally Superior Alternative among the other alternatives.

Of the remaining alternatives previously evaluated, Alternative 4 would eliminate the significant and unavoidable impact related to construction noise. When comparing project objectives, Alternative 4 would meet all the project objectives with the exception of partially meeting Objective No. 1 given that no retail/commercial is proposed. Therefore, Alternative 4 is identified as the environmentally superior alternative given that it would meet all project objectives.

Table 1-2. Comparison of Project and Alternatives Impacts

Environmental Issue Area	Proposed Project	Alternative 1 No Project/ No Build	Alternative 2 Affordable Housing Alternative	Alternative 3 Private Recreational Facility Alternative	Alternative 4 Construction Noise Setback Alternative
Aesthetics	Less than Significant	•	=	A	=
Air Quality	Less than Significant with Mitigation	▼	=	▼	▼
Biological Resources	Less than Significant with Mitigation	•	=	=	=
Cultural Resources	Less than Significant	▼	=	=	=

Table 1-2. Comparison of Project and Alternatives Impacts

Environmental Issue Area	Proposed Project	Alternative 1 No Project/ No Build	Alternative 2 Affordable Housing Alternative	Alternative 3 Private Recreational Facility Alternative	Alternative 4 Construction Noise Setback Alternative
Energy	Less than Significant	▼	=	▼	▼
Geology and Soils	Less than Significant with Mitigation	▼	=	=	=
Greenhouse Gas Emissions	Less than Significant	•	A	•	•
Hazards and Hazardous Materials	Less than Significant with Mitigation	▼	=	=	=
Hydrology and Water Quality	Less than Significant with Mitigation	•	=	=	=
Land Use and Planning	Less than Significant with Mitigation	•	=	=	=
Mineral Resources	Less than Significant	▼	=	=	=
Noise	Significant and Unavoidable (construction and cumulative construction)	▼ (Eliminate)	=	=	▼ (Eliminate)
Population and Housing	Less than Significant	▼	A	▼	▼
Public Services	Less than Significant	▼	A	▼	▼
Recreation	Less than Significant with Mitigation	•	A	•	•
Transportation	Less than Significant	▼	A	▼	▼
Tribal Cultural Resources	Less than Significant with Mitigation	•	=	=	=
Utilities and Service Systems	Less than Significant	▼	A	▼	▼
Wildfire	Less than Significant with Mitigation	•	=	=	=

Notes: = = Alternative is likely to result in similar impacts to issue when compared to project; ▼ = Alternative is likely to result in reduced impacts to issue when compared to project; ▲ = Alternative is likely to result in greater impacts to issue when compared to project.

2 Introduction

This Environmental Impact Report (EIR) has been prepared by the City of Santa Clarita (City) to evaluate potential environmental effects that could result from development of the proposed Wiley Canyon Project (project). This EIR has been prepared in conformance with the California Environmental Quality Act of 1970 (CEQA) Statute (California Public Resources Code, Section 21000 et. seq., as amended) and Guidelines (14 CCR 15000 et. seq.). The City is the lead agency under CEQA.

2.1 Summary of the Proposed Project

The project involves the creation of six separate lots (ranging in size from 31,011 square feet (0.7 acres) to 356,007 square feet (8.2 acres)) and the redevelopment of existing vacant land with a new mixed-use development consisting of a 277,108 square-foot senior living facility, 8,914 square feet of commercial space, 379 multifamily residential apartments, a publicly accessible outdoor recreation field space, and off-site circulation improvements (e.g., new roundabouts, traffic signals, Class I and II bike lanes on Wiley Canyon Road and Calgrove Boulevard, and pedestrian trails). The project site consists of approximately 31.8 acres of vacant land located in the Newhall community of the City.

2.2 CEQA Process

CEQA requires preparation of an EIR when there is substantial evidence supporting a fair argument that a proposed project may have a significant effect on the environment. The purpose of an EIR is to provide decision makers, public agencies, and the general public with an objective and informational document that fully discloses the environmental effects of the proposed project. The EIR process is intended to facilitate the objective evaluation of potentially significant direct, indirect, and cumulative impacts of the proposed project, and to identify feasible mitigation measures and alternatives that would reduce or avoid the proposed project's significant effects. In addition, CEQA requires that an EIR identify adverse impacts determined to be significant after mitigation.

In accordance with the CEQA Guidelines, a Notice of Preparation (NOP) was distributed on March 24, 2022, to public agencies, organizations, and interested individuals. The purpose of the NOP was to provide notification that the City intends to prepare an EIR and to solicit input on the scope and content of the EIR. Approximately 50 copies of the NOP were distributed to agencies and approximately 50 written comment letters were received from various agencies, organizations, and individuals. The letters and the NOP are included in Appendix A of this EIR.

A scoping meeting was held at City Hall on April 14, 2022. The purpose of this meeting was to seek input from agencies and the general public regarding the potential environmental impacts of the project. Approximately 58 people attended the scoping meeting. The public comments, questions, and concerns that were received at the scoping meeting generally included the following areas:

- Aesthetics changes of existing visual character and light pollution
- Air Quality Traffic-related air pollution
- Biological Resources the displacement of wildlife and the disruption of a wildlife corridor
- Geology and Soils construction impacts on soil pollution
- Hazards and Hazardous Materials wildland fire, emergency evacuation routes becoming overloaded

- Hydrology and Water Quality inadequate water supply in drought conditions, impacts on water quality to nearby waterways
- Land Use and Planning housing density of the proposed project, impacts associated with circulation and local property value
- Noise noise increases from construction and increased traffic
- Population and Housing housing density of the proposed project
- Public Services increased demand on schools and emergency services; emergency access to the site
- Recreation jurisdiction of the proposed on-site recreation areas
- Transportation increase in traffic, access in and out of the proposed project, traffic and safety impacts of proposed roundabout designs, emergency evacuation of the area, and access to public and emergency services
- Wildfire the wildfire potential of the project site, cumulative impacts the project would have on wildfire evacuations

This EIR focuses on all potential environmental impacts, including the comments received in response to the NOP. The issue areas analyzed in detail in this EIR include aesthetics, air quality, biological resources, cultural resources, energy, geology and soils, greenhouse gas emissions, hazards and hazardous materials, hydrology and water quality, land use and planning, mineral resources, noise, population and housing, public services, recreation, transportation, tribal cultural resources, utilities and service systems, and wildfire.

This Draft EIR is being circulated for 45 days for public review and comment. The timeframe of the public review period is identified in the Notice of Availability (NOA) attached to this Draft EIR. During this period, comments from the general public, organizations, and agencies regarding environmental issues analyzed in the Draft EIR and the Draft EIR's accuracy and completeness may be submitted to the lead agency at the following address:

Erika Iverson, Senior Planner City of Santa Clarita 23920 Valencia Boulevard, Suite 302 Santa Clarita, California 91355 Email: eiverson@santa-clarita.com

General questions about this EIR and the EIR process should also be directed to the address above. The City will prepare written responses to all comments pertaining to environmental issues raised in the Draft EIR submitted in writing and postmarked by the last day of the public review period identified in the NOA.

Prior to approval of the proposed project, the City, as the lead agency and decision-making entity, is required to certify that this EIR has been completed in accordance with CEQA, that the proposed project has been reviewed and the information in this EIR considered, and that this EIR reflects the independent judgment of the City. CEQA also requires the City to adopt findings with respect to each significant environmental effect identified in the EIR (California Public Resources Code, Section 21081; 14 CCR 15091). For each significant effect, CEQA requires the approving agency to make one or more of the following findings:

- The proposed project has been altered to avoid or substantially lessen significant impacts identified in the Final EIR.
- The responsibility to carry out such changes or alterations is under the jurisdiction of another agency.

 Specific economic, legal, social, technological, or other considerations make infeasible the mitigation measures or alternatives identified in the Final EIR.

If the City concludes that the proposed project will result in significant effects that cannot be substantially lessened or avoided by feasible mitigation measures and alternatives, the City must adopt a statement of overriding considerations prior to approval of the proposed project (California Public Resources Code, Section 21081[b]). Where the lead agency concludes that the specific economic, legal, social, technological, or other benefits outweigh the unavoidable environmental impacts, the lead agency may approve the proposed project after stating in writing the specific reasons to support its action.

In addition, public agencies, when approving a project, must adopt a Mitigation Monitoring and Reporting Program describing the changes that were incorporated into the proposed project or made a condition of project approval in order to mitigate or avoid significant effects on the environment (California Public Resources Code, Section 21081.6). Upon approval of the proposed project, the City will be responsible for implementation of the proposed project's Mitigation Monitoring and Reporting Program. This document will be attached to the Final EIR.

2.3 Organization of the EIR

This EIR is organized as follows:

Chapter 1, Executive Summary, outlines the conclusions of the environmental analysis and provides a summary of the proposed project and the project alternatives analyzed in the EIR. This section also includes a table summarizing all environmental impacts identified in the EIR along with the associated mitigation measures proposed to reduce or avoid each impact.

Chapter 2, Introduction, serves as a forward to the EIR, introducing the project, the applicable environmental review procedures, and the organization of the EIR.

Chapter 3, Project Description, provides a thorough description of the setting, objectives, characteristics, operation, and construction of the proposed project and required discretionary approvals.

Chapter 4, Environmental Analysis, describes the potential environmental effects of the proposed project, as well as proposed mitigation measures to reduce or avoid any potentially significant impacts. The discussion in Chapter 4 is organized by 19 environmental issue areas as follows:

- Aesthetics
- Air Quality
- Biological Resources
- Cultural Resources
- Energy
- Geology and Soils
- Greenhouse Gas Emissions
- Hazards and Hazardous Materials
- Hydrology and Water Quality
- Land Use and Planning

- Mineral Resources
- Noise
- Population and Housing
- Public Services
- Recreation
- Transportation
- Tribal Cultural Resources
- Utilities and Service Systems
- Wildfire

For each environmental issue area, the analysis and discussion are organized into subsections as described below:

- Environmental Setting This subsection describes the physical environmental conditions in the vicinity of
 the proposed project at the time of publication of the NOP. The environmental setting establishes the
 baseline conditions by which the City will determine whether specific project-related impacts are significant.
- Regulatory Framework This subsection describes the laws, regulations, ordinances, plans, and policies
 applicable to the environmental issue area and the proposed project.
- Thresholds of Significance This subsection identifies a set of thresholds by which the level of impact is determined.
- Impact Analysis This subsection provides a detailed analysis regarding the environmental effects of the
 proposed project, and whether the impacts of the proposed project would meet or exceed the thresholds
 of significance.
- Mitigation Measures This subsection identifies potentially feasible mitigation measures that would avoid
 or substantially reduce significant adverse project impacts.
- Level of Significance After Mitigation This subsection discusses whether project-related impacts would be reduced to below a level of significance with implementation of the mitigation measures identified in the EIR. If applicable, this subsection also identifies any residual significant and unavoidable adverse effects of the proposed project that would result even with implementation of any feasible mitigation measures.
- Cumulative Effects This subsection discusses the cumulative effects of the project in combination with the effects of other projects in the vicinity.

In addition to the subsections listed above, full citations for all documents referred to in each environmental issue area discussion are included at the end of each section or chapter.

Chapter 5, Other CEQA Requirements, addresses significant environmental effects that cannot be avoided, the significant irreversible environmental changes that would result from implementation of the proposed project, growth-inducing impacts associated with the proposed project, and potential secondary effects of mitigation measures included for the proposed project.

Chapter 6, Alternatives, discusses alternatives to the proposed project, including a No Project Alternative. This chapter describes the rationale for selecting the range of alternatives discussed in the EIR and identifies the alternatives considered by the City that were rejected from further discussion as infeasible during the scoping process. Lastly, Chapter 6 includes a discussion of the environmental effects of the alternatives that were carried forward for analysis and identifies the environmentally superior alternative.

Chapter 7, List of Preparers, gives names and contact information of those responsible for writing this EIR.

Appendices include various technical studies prepared for the proposed project, as listed in the Table of Contents.

The City, as the designated lead agency for the proposed project, is responsible for enforcing and verifying that each mitigation measure is implemented as required. However, the project applicant shall be responsible for implementing the mitigation measures required for the proposed project. As part of the Final EIR process, a Mitigation Monitoring and Reporting Program will be prepared.

3 Project Description

This chapter of the Draft Environmental Impact Report (EIR) provides a description of the proposed Wiley Canyon Project (project). The purpose of this chapter is to describe the project in a manner that will be meaningful for review by the public, reviewing agencies, and decision-makers in accordance with CEQA the CEQA Guidelines. Per the requirements of CEQA Guidelines Section 15124, a complete project description must contain the following information:

- (a) the precise location and boundaries of the proposed project, shown on a detailed map, along with a regional map of the project's location (see Section 3.1 and Chapter 2, Section 2.2, Project Location);
- (b) a statement of the objectives sought by the proposed project, which should include the underlying purpose of the project (see Section 3.3);
- (c) a general description of the project's technical, economic, and environmental characteristics, considering the principal engineering documentation and supporting public service facilities (see Section 3.4 and 3.5); and
- (d) a statement briefly describing the intended uses of the EIR, including a list of the agencies that are expected to use the EIR in their decision making, a list of permits or other approvals required to implement the project, and a list of related environmental review and consultation requirements imposed by federal, state, or local laws, regulations, or policies (see Sections 3.6 and 3.7).

In accordance with CEQA Guidelines Section 15124, the description of a project "should not supply extensive detail beyond that needed for evaluation and review of environmental impacts." This chapter of the Draft EIR includes the required information, as listed above.

As stated in CEQA Guidelines Section 15126.2, an EIR must identify and focus on the significant effects of a project on the environment. In assessing the impacts of a proposed project, the lead agency "should normally limit its examination to changes in the existing physical conditions in the affected area as they exist at the time the notice of preparation is published." The approval and implementation of the project would result in physical changes to the environment, which are analyzed in this Draft EIR.

The proposed project involves the redevelopment of existing, vacant parcels with a new mixed-use development consisting of a senior living facility, multifamily residential, commercial uses, recreation, and off-site roadway improvements. Pursuant to CEQA Guidelines Section 15123, this chapter describes the location, objectives, and characteristics of the proposed project, followed by a statement describing the intended uses of this EIR.

3.1 Project Location

The project site consists of approximately 31.8 acres of vacant land located at 24924 Hawkbryn Avenue, bordered by Interstate 5 (I-5) to the west, Wiley Canyon Road to the east, Hawkbryn Avenue to the north and Calgrove Boulevard to the south, within the Newhall area of the City of Santa Clarita (City), as shown in Figure 3-1, Project Location. The project site is located approximately 28 miles northwest of downtown Los Angeles and is locally

accessible via Wiley Canyon Road and Hawkbryn Avenue. Regionally, the project site is accessible from the I-5 freeway via Calgrove Boulevard, south of the site, or via Lyons Avenue approximately 0.6 miles north of the site. The project site is located entirely within the City's jurisdictional boundaries, and unincorporated Los Angeles County is located immediately west of the I-5 freeway.

The project site consists of the following Assessor Parcel Numbers (APNs): 2825-012-007, 2825-012-010, 2825-012-011, 2825-012-901, and 2825-012-902. Specifically, the project site is located in Township 3 North, Range 16 West, Sections 4, 9 and 10, as shown on the U.S. Geological Survey 7.5-minute Oat Mountain Quadrangle topographic map.

3.2 Environmental Setting

The baseline for a project is typically the physical environmental condition that exists in the vicinity of a project when the Notice of Preparation (NOP) is published CEQA Guidelines section 15125(a). The NOP for the project was published on March 24, 2022. The following summarizes the current land use of the project site, adjacent and surrounding land uses, and the existing general plan and zoning designations applicable to the project site. The existing site conditions are shown in Figure 3-2a, Existing Conditions.

3.2.1 Existing On-Site Uses

The project site is currently vacant with the exception of two single-story metal buildings, two mobile homes, former mule barns, and one drained, man-made water basin associated with the former Smiser Mule Ranch which historically occupied the site. Ruderal vegetation, grass, brush, and trees (including oak trees (see Section 3.4.6, below) cover the majority of the project site. The Santa Clarita General Plan and Zoning designation for the project site is Mixed Use – Neighborhood (MX-N), and the site is located within a Planned Development Overlay (PD) zone. See Figure 3-2a, Existing Conditions, Figure 3-2b, Zoning, and Figure 3-2c, Land Use, for existing on-site and surrounding land uses.

As identified in the Phase I Environmental Site Assessment (ESA) prepared for the project site, the northern portion of the site was historically used as a mule ranch and pastureland. Two on-site structures consist of approximately 6,750 square feet and approximately 9,380 square feet in size, both with steel frames on reinforced concrete slab foundations with metal roofing and metal exterior walls constructed in 1978 and 1980, respectively (see Appendix H, Phase I ESA). Historic uses of the Smiser Mule Ranch include ranch operations and on-site residences. The project site was last used as a woodshop for furniture and cabinet manufacturing within the existing metal buildings and is currently used for recreational vehicle (RV) and boat storage. No sampling for asbestos or lead paint was conducted as part of the Phase I ESA. No oil or gas uses, or activity has been recorded on site. Site explorations recorded 55-gallon drums utilized for the storage of domestic waste on site. In addition, two water wells, two above ground water tanks, two propane tanks, and an underground septic system in the vicinity of the residential structures were recorded on site.

The northeastern portion of the project site, east of Wiley Canyon Road, consists of vacant land on an elevated hillside. This portion of the site is improved with an existing retaining wall and dirt roadways which provide access for an existing easement owned and maintained by the Los Angeles County Public Works, Flood Control District, which bisects the project site to accommodate existing drainage flow associated with the South Fork of the Santa Clara River. The South Fork Santa Clara River flows into the project site through a triple concrete box culvert under the I-5 freeway at the southern end of project site and continues northerly into a concrete-lined channel. An

unnamed intermittent drainage and several culverts also contribute runoff from surrounding development. According to the Aquatic Resources Delineation Report prepared for the project (Appendix I), the South Fork of the Santa Clara River and the unnamed intermittent drainage to which it connects at the southern end of the project site are two aquatic resources considered to be waters of the U.S. and waters of the State, and therefore subject to the jurisdiction of the U.S. Army Corps of Engineers (USACE) under Section 404 of the Clean Water Act (CWA), the Los Angeles Regional Water Quality Control Board (RWQCB) under Section 401 of the CWA, the California Department of Fish and Wildlife (CDFW) under Fish and Game Code Section 1600, et seq., and the Porter-Cologne Water Quality Control Act. The main drainage extends roughly north-south along the east side of the project site, adjacent to Wiley Canyon Road. The drainage ranges from 7 to 15 feet deep from the adjacent relatively level grades and consists of active alluvial deposits, large cobbles and boulders, and thick vegetation with numerous trees. The drainage transitions to a concrete-lined channel within the northern portion of the site (Appendix E, Geotechnical Report).

3.2.2 Adjacent and Surrounding Uses

The project site is surrounded by urban and suburban development, and vacant land and has been previously disturbed by past agricultural activities and limited commercial use. A mobile home development, known as the Mulberry Mobile Home Park, borders the site to the north. A flood control channel is located between the northern segments of the project site and Wiley Canyon Road, and single-family residences are located northeast of the project boundary. Wiley Canyon Road, a north-south two-lane roadway, partially borders the site to the east, and existing electrical power lines run north-south on the eastern edge of the Wiley Canyon Road right-of way. To the south of the project site is a commercial area with a range of uses including Valley Vascular Associates, Academy Swim Club, Survival of the Fittest Health and Wellness, and the Santa Clarita Athletic Club. The I-5 freeway borders the site to the west, separated from the project site by a chain-linked fence.

3.3 Project Objectives

The primary objectives of the proposed project include the following:

- Create a new mixed-use community that allows for residential, retail/commercial, and senior housing while
 preserving and enhancing natural resources.
- Provide a sensitive and protective interface with the adjacent Wiley Canyon Creek by utilizing appropriate setback, grading, landscape, buried bank stabilization and water quality treatments.
- Provide development and transitional land use patterns that are compatible with surrounding communities and land uses and are consistent with the City's General Plan.
- Arrange land uses and add amenities to reduce vehicle miles traveled and to encourage the use of transit.
- Design neighborhoods to locate residential and non-residential land uses in close proximity to each other and major road corridors, transit and trails.
- Provide public spaces, including plazas, private and public recreational areas and trails.
- Implement waste reduction, drought-tolerant landscaping, and use of water efficiency measures.
- Provide a trail with public access along Wiley Canyon Road and within the project site along Wiley Canyon Creek.
- Provide a landscape design emphasizing a pleasant neighborhood character and inviting streetscapes.

- Enhance and augment the City's housing market by providing a variety of housing product to meet the needs of future residents.
- Maintain and enhance the use of Wiley Canyon Creek with native revegetation as a to serve as a natural channel to be utilized by wildlife.
- Incorporate new oak trees into the project design, including public spaces.
- Incorporate vehicle and pedestrian circulation improvements on Wiley Canyon Road and Calgrove Boulevard through the widening of the roadways where needed, as well as the addition of appropriate traffic controls at various intersections.
- Provide a Class I trail and sidewalks along the roadways.
- Provide publicly accessible passive and active recreational opportunities for prospective residents and existing residents in proximity to the project site.
- Include amenities to specifically support senior residents requiring senior services including memory care, supporting amenities for basic-needs nursing care, and housekeeping service.
- Include recreational amenities to improve quality of life of prospective on-site residents and existing off-site
 residents and encourage senior living tenants to socialize and maintain active lifestyles.

3.4 Proposed Project Characteristics

The proposed project would result in the creation of seven separate lots (ranging in size from 31,011 square feet to 356,007 square feet) and the redevelopment of existing vacant land with a new mixed-use development consisting of the following components, as shown in Figure 3-3, Site Development Plan: a 277,108 square-foot senior living facility, 8,914 square feet of commercial space, 379 multifamily residential apartments, a publicly accessible outdoor recreational field space, and off-site circulation improvements (e.g., new roundabouts, traffic signals, Class I, II, and III bike lanes on Wiley Canyon Road and Calgrove Boulevard, and pedestrian trails). As shown on Figure 3-4a through 3-4c, Tentative Map, the project site is proposed in a total of seven lots and three planning areas, as further discussed below.

Table 3-1. Summary of Project Uses

Use	Units	
Senior Living	Assisted Living: 61 units	
	Independent Living: 130 units	
	Memory Care: 26 beds	
	TOTAL: 277,108 square feet	
Commercial Uses	8,914 square feet	
Multifamily Residences (Apartments)	379 units	
	TOTAL: 391,258 square feet	
Recreation/Undeveloped Areas	Passive recreational pad: 50,600 sf	
	Pedestrian/Bike Trails: 7,040 linear feet	
	Green Belt Open Space: 5 acres	
	Planning Area 6: 128,659 square feet (2.9 acres)	
Infrastructure Improvements	Drainage Basin: 59,407 square feet	
	Water Quality Basin 1: 7,762 square feet	
	Water Quality Basin 2: 6,344 square feet	

Table 3-1. Summary of Project Uses

Use	Units	
Parking	Multifamily spaces: 772 spaces	
	Senior Living: 126 spaces	
	Commercial: 45 spaces	

Source: Wiley Canyon, LLC

3.4.1 Senior Living Facility

A 277,108-square-foot senior living facility is proposed, consisting of 130 independent living units, 61 assisted living units, and 26 memory care beds. This facility would be located within Planning Area 1 on a 7.27-acre pad in the northernly portion of the project site. Within the proposed senior living facility would be an 8,914-square-foot commercial space on the first floor by the facility's entrance. The building is proposed to be four stories in height. The maximum building height for any proposed structure on the project site would not exceed 50 feet.

3.4.2 Multifamily Residential

A total of 379 multifamily residential units are proposed to be south of the senior living facility within Planning Areas 2 and 3 of the project site. A color palette consisting of neutral earth tone of brown with faux wood shutters, decorative ceramic tiles, decorative iron wall grill, and fabric awnings are proposed for each residential building. See Figure 3-5, Conceptual Elevations.

Within Planning Area 2, a total of five, 3-story buildings comprised of 152 units would be constructed totaling approximately 135,594 square feet. Amenities on site would include a leasing center, clubhouse with fitness center, and a pool area, totaling 5,886 square feet. The proposed residences would range from 1-, 2-, and 3-bedrooms as well as loft style apartments. In total, the 152 units would be located on a 4.47-acre pad.

Within Planning Area 3, a total of eight buildings with 227 units would be constructed within four, 4-story buildings and four, 2-story buildings. Planning Area 3 would be developed with approximately 247,378 square feet of residential uses. The proposed residences would consist of studios, and 1-, 2-, and 3-bedroom apartments as well as a 2,400 square-foot clubhouse and pool area. In total, the proposed 227 residential units would be located on an 8.17-acre pad.

3.4.3 Commercial Uses

As previously mentioned, approximately 8,914 square feet of commercial retail space would be constructed on the first floor of the senior living facility by the facility's front entrance.

3.4.4 Recreation/Undeveloped Areas

The project proposes active and passive on-site recreational facilities. A 50,600-square-foot passive recreational grass pad would be located on the southern portion of the project site. To facilitate greater pedestrian activity in and around the site, approximately 7,040 linear feet (1.3 miles) of 16-foot-wide pedestrian trails/maintenance road would be constructed throughout the project site and along Wiley Canyon Road to provide active recreational opportunities to on-site residents and provide greater pedestrian network connectivity to the surrounding areas,

accessible to both visitors and existing residents in the vicinity. Lot 6, which would be 128,659 square feet (2.9 acres) in size and is located east of Wiley Canyon Road would remain undeveloped under the proposed project.

Within the senior living facility, a memory care garden with a central fountain, table and bench seating, faux turf, and enhanced concrete pavers are proposed. The senior living facility would also include a pool and spa, chaise lounge seating, and outdoor dining areas as well as a barbeque area with a shade structure, counter space, and pedestrian pathways and paving.

The multifamily residences would include a community recreation area with a pool and spa, lounge seating, outdoor dining tables, cabana shade structures, and outdoor barbeque counter. See Figure 3-4a through 3-4c, Tentative Tract Map and Figure 3-6, Conceptual Landscape Plan for locations of recreational amenities and undeveloped areas.

3.4.5 Landscaping

The project site would be redeveloped to include landscaping throughout each project component. A total of 450 newly planted trees are proposed, including but not limited to Date Palms (*Phoenix dactylifera*), Coastal live oak (*Quercus agrifolia*), and Southern Magnolias (*Magnolia 'D.D Blancard*). Landscaping would be used to screen certain facilities on site, such as transformers and maintenance buildings. In addition, the project would utilize landscaping for proposed fuel modification zones, as described in Section 3.4.7.2. Figure 3-6, Conceptual Landscape Plan for details.

3.4.6 Oak Trees

The project site contains 36 existing oak trees on and/or adjacent to the site. According to the City of Santa Clarita Municipal Code section 17.51.040, Oak Tree Preservation, the City protects all native oak trees, including without limitation, canyon oak (*Quercus chrysolepis*), coast live oak, interior live oak (*Quercus wislizenii*), valley oak (*Quercus lobata*), and scrub oak (*Quercus dumosa*) in recognition of their historical, aesthetic, and environmental value. All 36 trees meet the minimum requirements described in the City of Santa Clarita Oak Tree regulations (Resolution No. 90-177, adopted September 11, 1990). A total of 12 oak trees are on site and an additional twenty-four (24) oak trees are off-site within the project's planned roadway improvements (see Section 3.4.9, Circulation and Access, for more discussion).

All 12 trees on the project site are coast live oaks, including two oaks that qualify as heritage trees (Oaks # 451 and #454), by exceeding the size threshold as described in the City's ordinance. Both of the heritage oaks may be affected by proposed project construction activities. Seven of the oak trees (Oaks # 451 and #453 through #458) occur along the western property boundary and may be offsite in the Caltrans highway right-of-way. Trees #460 and #466 are located east of the project boundary, between the eastern boundary and Calgrove Boulevard. Tree #459 is located outside of the northern portion of the project boundary adjacent to the mobile home park and would be impacted by project construction. A total of 24 oak trees (Oaks #QA1 through #QV22) are located on or immediately adjacent to proposed infrastructure improvements associated with the project entrance or the Wiley Canyon Road, Valley Oak Court, and Calgrove Boulevard intersection. None of the surveyed trees associated with roadway infrastructure improvements qualify for heritage status.

Per the Oak Tree Report (Appendix C-2), barrels of potentially hazardous hydraulic oil were previously found leaking in the vicinity of two oak trees (Oaks #453 and #454) and have been removed since the initial site visit. Oaks #450

through #456 fall within the proposed project design area and Oaks #452, #455, and #456 would be removed as a result of project implementation. Oaks #450, #451, #453, #454, #457, and #459 may be impacted from project construction if any tree requires cutting, pruning, or encroachment. Oaks #QA4 through #QA6, #QA8 through #QA11, #QL12, #QL13, #QL15 through #QL18, and #463 may be encroached upon by construction of the roadway infrastructure improvements. All potential oak tree impacts would require an oak tree permit from the City. As shown in Table 3-2, a total of four oak trees are proposed to be removed, and encroachments are proposed for 19 oak trees.

Table 3-2. Oak Tree Plan Summary

Tree No. (#)	Status	Proposed Action
450	None	To be removed
451	Heritage	To be impacted
452	None	To be removed
453	None	To be impacted
454	Heritage	To be impacted
455	None	To be removed
456	None	To be removed
457	None	To be impacted
459	None	To be impacted
QA4	None	To be impacted
QA5	None	To be impacted
QA6	None	To be impacted
QA8	None	To be impacted
QA9	None	To be impacted
QA10	None	To be impacted
QA11	None	To be impacted
QL12	None	To be impacted
QL13	None	To be impacted
QL15	None	To be impacted
QL16	None	To be impacted
QL17	None	To be impacted
QL18	None	To be impacted
463	None	To be impacted

Source: Appendix C, Oak Tree Report

See Figure 3-4a through 3-4c, Tentative Tract Map, for existing oak tree locations.

3.4.7 Fire Protection and Fuel Modification

3.4.7.1 Fire Protection

The project site is located within a Very High Fire Hazard Severity Zone (VHFHSZ) in a Local Responsibility Area (LRA). Accordingly, fire protection measures would be implemented as part of the project design to reduce the risk of wildfire hazards. Fire access would include 26-foot and 28-foot clear fire lanes throughout the site, 150-foot fire hose length in select areas, and 10- to 30-foot fire ladder access areas (see Figure 3-7, Fire Access).

Additionally, the project would implement a Conceptual Wildfire Evacuation Plan (CWEP), provided as Appendix N, which is based on the Wildfire Evacuation Analysis for the project including existing and proposed evacuation travel times, roadway capacity and local land uses. The CWEP includes a quick reference guide to project staff, residents, and visitors; a graphical evacuation route map; background on how evacuations are typically conducted; and recommendations for improving project area evacuations. The Fire Evacuation Plan also analyzes and addresses the ability for the site to serve as a temporary refuge for its staff and visitors and for a portion of the neighboring residents, including recommended ignition resistant site enhancements.

3.4.7.2 Fuel Modification

The project would implement fuel modification per City requirements to reduce fire hazards around all structures by providing a defensible space or firebreak between structures and areas of flammable vegetation. Zone A, Setback Zone, would include landscaping within the project site inside the senior living and residential areas with a minimum setback of 30 feet from proposed structures. This area would be owner-maintained and permanently irrigated. Zone B, Irrigation Zone/ Transition Zone, would have a minimum setback of 30 feet to 70 feet next to Zone A. Thus, Zone B would consist of landscaping and project design features including engineered slopes that are permanently irrigated approximately 100 feet from structures. Lastly, the project proposes a Zone C, Native Brush Thinning Zone within the undeveloped area located east of Wiley Canyon Road. This area would have a minimum setback of 50 to 100 feet (or up to 200 feet from structures), comprised of thinned and maintained vegetation. Zone C would not be irrigated. See Figure 3-6, Conceptual Landscape Plan, for fuel modification zone locations.

3.4.8 Utilities and Infrastructure Improvements

3.4.8.1 Utilities

Once constructed, the proposed project would include new sources of lighting, infrastructure improvements including curb and gutter, storm drain, and water and sewer connections to existing facilities within the local vicinity. The project proposes to connect to an existing 12-inch sewer line and a 12-inch dip water line located to the east of the project site along the right-of-way for Wiley Canyon Road. Under existing conditions, an existing storm drain box culvert is located adjacent to Wiley Canyon Road and the South Fork of the Santa Clara River.

Existing power poles and overhead electric lines would be removed along the western boundary of the site adjacent to the I-5 freeway, with the exception of select power poles and overhead lines at the southern end of the site adjacent to the proposed drainage basin, and updated, underground electrical lines would be installed. Electrical transformer units would be installed intermittently around the perimeter of the project site.

Under existing conditions, the project would connect to and utilize existing utilities and service systems surrounding the project site and nearby development. The project would be served by the following utility service providers:

- Potable Water Santa Clarita Valley Water Agency
- Sanitary Sewer Los Angeles County Sewer Maintenance Department
- Gas Southern California Gas Company
- Electricity Southern California Edison Company
- Cable TV Time Warner
- Telephone AT&T

Additionally, the project would include a trash compactor within the senior living facility and at the southeastern corner of the multifamily apartment buildings to be located adjacent to a small maintenance building for storage and use by site maintenance staff.

3.4.8.2 Basins

A 30,011-square-foot (0.69-acre) drainage basin would be located immediately south of the multifamily apartment buildings, and two smaller water quality basins would be located at the northwestern end of the project site and the eastern portion of the site adjacent to the multifamily residences. The first basin, located in the most northern portion of the project site, directly north of the parking area for the memory care building, would be approximately 7,762 square feet (0.18 acres) in size, and the second basin, located in the eastern portion of the project site would be approximately 6,344 square feet (0.15 acres) in size.

3.4.8.3 On-site Infrastructure Improvements

The proposed project would include the installation of new walls and fences within and surrounding the project site. A 6-foot masonry wall is proposed create the northern boundary of the site. The project also proposes a 5-foot retaining wall on top of 5-foot earth berm on the site's western border. To the east, a 5-foot vinyl or wood lodge pole fence would be installed along the proposed asphalt trail. Within the project site, a 5-foot 6-inch tube steel fence would be installed around the proposed pool as well as 6-feet metal slide gates and block enclosures with a motor for the entrance to the multifamily residential component.

Additionally, between the drainage basin discussed in Section 3.4.8.2 above, and the South Fork of the Santa Clara River, the project proposes a soil cement bank protection, adjacent to the asphalt trail and maintenance road, for protection during a 25-year storm event.

3.4.8.4 Off-site Infrastructure Improvements

The majority of the off-site infrastructure improvements would be street improvements along Wiley Canyon Road and its intersecting streets, including Fourl Road, Canerwell Street, Valley Oak Court, and Calgrove Boulevard. Street improvements would include three new roundabouts, new curbs and gutters, a storm drain box culvert extension, new bus bays, bicycle paths (e.g., Classes I and II) and ramps, walking trails and sidewalks, as well as changes to existing directional signage and utilities (i.e., new power poles). Additionally, the intersection of Calgrove Boulevard and I-5 located at the southwest corner of the project site would be signalized (see Figure 3-4c, Tentative Map). For more discussion on circulation, see Section 3.4.9, Circulation and Access, below. Finally, the following off-site improvements would be needed to facilitate the buildout of the project:

- Replace approximately 50 feet of a 6-inch water line within Old Wiley Canyon Road with an 8-inch water line.
- Replace approximately 200 feet of an 8-inch water line within Old Wiley Canyon Road with a 12-inch water line.
- Construct a new 1.5-million-gallon storage tank within the existing SCVWA tank site located approximately 3,100 feet east of the project site.
- Replace existing undersized pumps located within an existing SCVWA pump station located on Peachland Avenue with a new 2,200 gallon per minute capacity station (total capacity = 3,300 gallons per minute, 2 duty and one standby pump). This existing pump station is located approximately 3,700 feet northeast of the project site.

3.4.9 Circulation and Access

The project would include a number of on-site circulation improvements as well as off-site improvements to Wiley Canyon Road. These improvements differ across intersections and segments of the roadway; however, proposed components are similar along the right-of-way, including proposed Class I, II and III bike paths, pedestrian facilities and trail paths, and two drive lanes (one for each direction). See Figure 3-8, Proposed Project Mobility Plan.

3.4.9.1 Roadway Improvements and Access

Public access to the project would be provided by a private street connection to Wiley Canyon Road. The primary project entrance would be located at the northern end of the site and controlled by a single-lane roundabout. An emergency vehicle-only access would be provided by a driveway on Hawkbryn Avenue. The project would also include the installation of off-site roundabouts along Wiley Canyon Road at the project's entrance, Canerwell Street, and at Calgrove Boulevard.

Improvements along Wiley Canyon Road in the vicinity of the project frontage would include a Class I bike path and walking trail on the west side of Wiley Canyon Road and bus bays from the northern boundary of the project site to Calgrove Boulevard.

3.4.9.2 Pedestrian Facilities

Pedestrian sidewalks are proposed throughout the senior living facility and multifamily residential components of the project site. Along the western edge of Wiley Canyon Road and the southern portion of the project site would be a multi-use trail providing pedestrian access and maintenance access for the site's facilities. In addition, an entry kiosk with sliding security gates would be installed at the main entrance for the multifamily residential area.

3.4.9.3 Bicycle Facilities

Existing bicycle facilities in the vicinity of the project site include Class II on-street striped bicycle lanes on Calgrove Boulevard east of Wiley Canyon Road and on Wiley Canyon Road north of Lyons Avenue. There is also a paseo with access on Wiley Canyon Road opposite Tournament Road and on the north side of Lyons Avenue between Avenida Entrana and Avenida Rotella. Per the Santa Clarita Non-Motorized Transportation Plan, a Class III bicycle route is proposed along Wiley Canyon Road from Lyons Avenue to Calgrove Boulevard; however, as proposed the project would provide a Class I trail from the project site south to Calgrove Boulevard, and Calgrove Boulevard would be restriped to provide Class II bike lanes. This would augment connectivity to the existing bicycle network between the project site with other parts of the City. Other proposed bicycle facility improvements include a Class II bicycle lane along a large segment of The Old Road that would provide access to cyclists near the project site on the west end of Calgrove Boulevard.

3.4.9.4 Public Transportation

The area around the project site is served by City of Santa Clarita Transit (SCT) Routes 4, 5, 6, and 14. These routes stop at the intersection of Wiley Canyon Road and Lyons Avenue, just over a half mile north of the project site. There are other transit facilities in the City of Santa Clarita that can be accessed through these routes to provide regional access to and from the project site. These facilities include the Newhall Metrolink station and the McBean Regional Transit Center. Furthermore, SCT provides additional service trips during peak student travel times with two routes

traveling along Wiley Canyon Road between Lyons Avenue and Calgrove Boulevard. On school days, Route 634 provides service to West Ranch High School and Rancho Pico Junior High School, and Route 641 provides service to Hart High School and Placerita Junior High School. As part of the proposed project, new bus bays would be installed from the northern boundary of the project site to Calgrove Boulevard.

3.4.10 Parking

The project proposes a total of 966 on-site (off-street) parking for both the senior living and multifamily residential areas of the site. A total of 109 parking stalls would be reserved for the senior living residents, consistent with the parking requirements for each component of the senior living facility. The residential component of the project would reserve 582 parking spaces within garage sand carports for the multi-family residents. The remaining 275 parking stalls would be shared by the commercial use and guests as outlined in the shared parking analysis for the project.

3.4.11 Project Design and Sustainability Features

The project would be designed in accordance with the State of California Building Code and Santa Clarita Municipal Code requirements, as applicable. Construction would be performed by qualified contractors, and contract documents, plans, and specifications would incorporate stipulations regarding standard legal requirements and acceptable construction practices, including, but not limited to, noise, geologic conditions, drainage and water quality improvements, water quality protection and erosion and sedimentation control, construction-related solid waste, and water supply.

Additionally, the project would employ a number of energy and water efficiency features, air quality and greenhouse gas emission reduction features, and general project design features to reduce the potential for adverse environmental effects, as described below.

3.4.11.1 Energy Efficiency

- The project would include the installation of ENERGY STAR compliant appliances and equipment, including ENERGY STAR compliant bathroom fans in residential units.
- All structures would meet applicable energy standards delineated in the Title 24 Building Energy Efficiency Standards and CALGreen Code, or applicable version at the time of building permit issuance.
- The project would utilize energy efficient heating, ventilation and air conditioning (HVAC) systems that would meet or exceed the applicable energy standards in ASHRAE Appendix G and the Title 24 Building Energy Efficiency Standards and CALGreen Code, or applicable version of these standards at the time of building permit issuance.
- Energy commissioning would be performed for buildings larger than 10,000 square feet.

3.4.11.2 Water Efficiency

The project would provide water efficiency features for indoor water usage that include use of ENERGY STAR appliances and water fixtures, and would reduce indoor water usage, including a corresponding reduction in wastewater generation, to below 20 percent of that identified per CALGreen Code requirements.

• The automatic irrigation system that will be installed as part of the project will include irrigation controls with weather sensing or soil moisture sensors.

3.4.11.3 Transportation

- The project is located near the I-5 and Santa Clarita transit options (bus, rail), which will provide easy access to jobs and other commercial areas in Santa Clarita and the greater Los Angeles area.
- The project will provide accessible and electric vehicle parking per City and CALGreen Code requirements.
- The project will provide a Class I bike trail from the project site south to Calgrove Boulevard, and Calgrove Boulevard will be restriped to provide Class II bike lanes to connect cyclists at the project site to other parts of the city with existing bike infrastructure.
- Bicycle parking would be provided for up to 5 percent of vehicle trips for on-site residents and visitors.
- The project would include construction of a bike lanes, improvements to the pedestrian network, and effective internet access to encourage telecommuting and alternative work schedules.

3.4.11.4 Solid Waste

- The project would employ a minimum of 50 percent recycled or reused nonhazardous construction and demolition debris.
- The project construction contractor would document all types of waste recycled, diverted or reused.

3.5 Construction

The project is anticipated to be constructed over an approximately 24-month period, commencing in Q1 of 2025 with occupancy of on-site structures to begin Q4 of 2027. Conceptual construction phasing and construction trips are provided in Table 3-3.

Table 3-3. Construction Schedule, Phasing and Trips

Phase	Duration	Workers/Day	Haul Truck Trips (total/phase)
Demolition	14 days	10	8
Site Preparation	14 days	5	3
Grading and Excavation	7 months	15	4,770
Drainage and Utilities	7 months	10	572
Foundation Construction	4 months	25	170
Building Construction	19 months	50	3,940
Architectural Coatings	6 months	15	0
Paving	4 weeks	15	570

Source: Appendix B, Air Quality Technical Report

Note: A total of 5 days is assumed as one week and 20 days is assumed to be a month.

The project is not expected to export soil; however, approximately 85,000 cubic yards of soil would be imported on-site.

Unless otherwise noted, construction activities are anticipated to occur between the hours of 7:00 a.m. and 7:00 p.m., Monday through Friday, consistent with the noise regulations in the Santa Clarita Municipal Code ("SCMC"). If construction is required on one or more Saturdays, construction activities will be limited to the hours of between 8:00 a.m. and 5:00 p.m., also consistent with the City's noise regulations. No work may be performed on Sundays and/or the following public holidays: New Year's Day, Independence Day, Thanksgiving, Christmas Day, Memorial Day, and Labor Day. The City of Santa Clarita Public Works Department may issue a permit for work to be done after hours provided that containment of construction noise is provided by the project.

3.6 Intended Uses of the EIR

An EIR is a public document used by a lead agency to analyze the environmental effects of a project and to disclose possible ways to reduce or avoid significant environmental impacts, including through mitigation measures and/or alternatives to the proposed project. As an informational document, an EIR does not make recommendations for or against approving a project. The main purpose of an EIR is to inform public agency decision makers and the public about potential environmental impacts of a project CEQA Guidelines section 15121. This EIR will be used by the City, as the lead agency under CEQA, in making decisions with regard to the approval of the proposed project described above and the related approvals described below.

3.7 Project Approvals Required

The City is the lead agency for the proposed project pursuant to CEQA Guidelines Section 15367. The proposed project would require a number of permits and approvals by the City, including the following:

- Tentative Map to subdivide the project site into six lots
- Grading Permit for up to 44,000 cubic yards of cut and 59,000 cubic yards of fill, and the import of approximately 85,000 cubic yards of fill
- Conditional Use Permit for new development within the Planned Overlay District
- Minor Use Permit for commercial floor area ratio that does not meet the minimum required in the zone, and the import of approximately 85,000 cubic yards of fill
- Development and Architectural Design Review for the development of the proposed project
- Oak Tree Permit for removal of, encroachment upon, and/or impact to existing oak trees
- Environmental Impact Report certification as required by the California Environmental Quality Act
- Clean Water Act Section 404 Permit from the U.S. Army Corps of Engineers (USACE) (if jurisdictional aquatic resources are impacted)
- Clean Water Act Section 401 Water Quality Certification from the Los Angeles Regional Water Quality Control Board (RWQCB) (if jurisdictional aquatic resources are impacted)
- Streambed Alteration Agreement from the California Department of Fish and Wildlife (CDFW) pursuant to California Fish and Game Code Section 1602 (if jurisdictional aquatic resources are impacted)

3.8 Related Projects

A list of related projects has been developed as part of this EIR. All projects that are proposed (i.e., with pending applications), recently approved, under construction, or reasonably foreseeable that could produce a cumulative

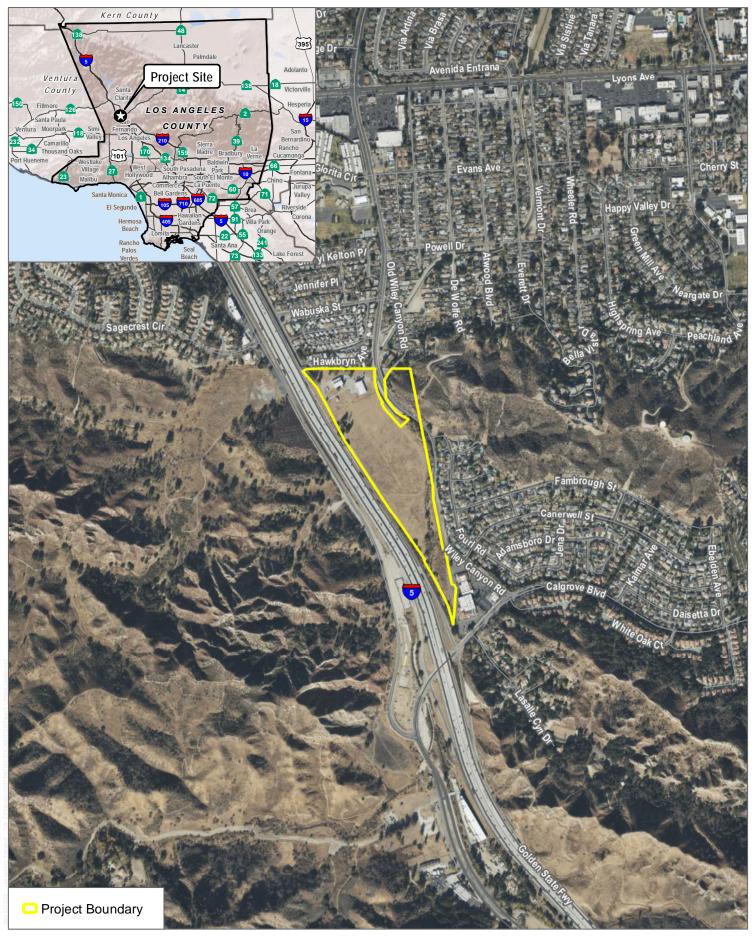
impact on the local environment when considered in combination with the proposed project are included in this EIR. These projects can include, if necessary, projects outside of the lead agency's jurisdiction. CEQA Guidelines Section 15130 stipulates that EIRs must consider the significant environmental effects of a proposed project as well as "cumulative impacts." A cumulative impact is defined as an impact that is created as a result of the project evaluated in the EIR combined with the impacts of other projects, thereby causing related impacts (CEQA Guidelines section 15355). As stated in CEQA Guidelines Section 15130(a)(1), the cumulative impacts discussion in an EIR need not discuss impacts that do not result, at least in part, from the project evaluated in an EIR. Cumulative impacts may be analyzed by considering past, present, and probable future projects with related or cumulative impacts (CEQA Guidelines section 15130(b)(1)(A)).

In this Draft EIR, cumulative impact analyses are summarized within each environmental topic section. The study areas for the cumulative impact analyses vary by resource area. Table 3-4 lists the related projects that are considered in the cumulative impact analyses throughout this EIR.

Table 3-4. Related Projects

No.	Project Name	Status	Description
1	Valley Street Condominiums	Pending	Construction of five (5) single family condominium units.
2	Our Lady of Perpetual Help Church	Pending	Redevelopment of an existing church to construct a new 21,000-square-foot church and parking lot.
3	Shadowbox Studios	Pending	Film and television studio facility (1,294,500 square feet) on 93.5 acres.
4	Trails at Lyons Canyon	Pending	Construction of 504 residential units on 233 acres including recreation center, fire station, open space, recreational amenities, and trails.

Source: Appendix K, Traffic Impact Analysis. See Figure 2-6 for related project locations.

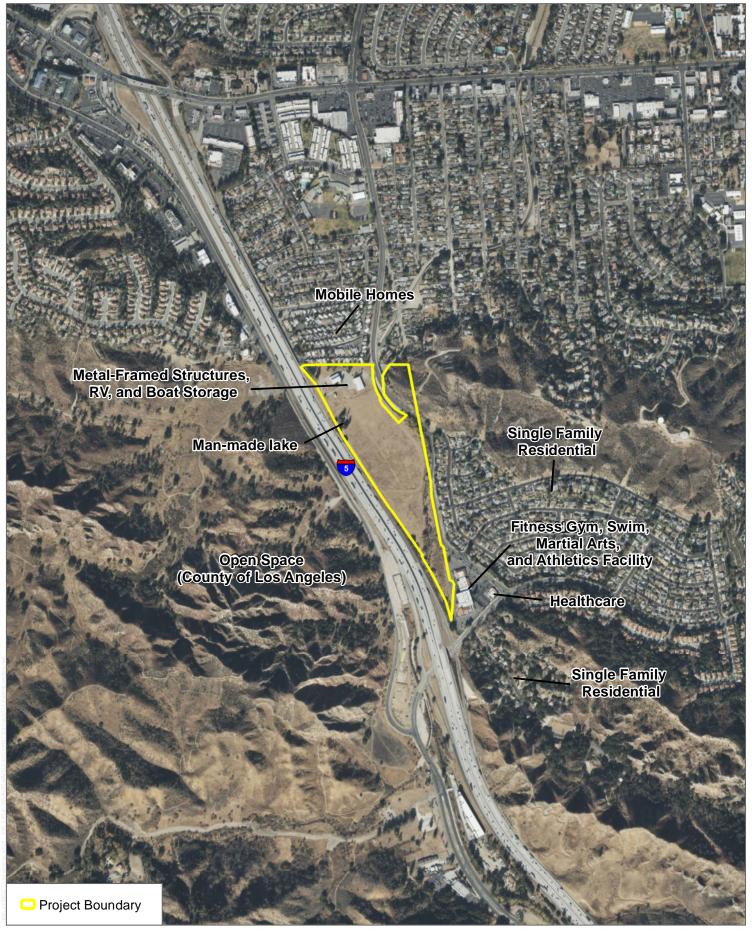


SOURCE: Bing Imagery 2022



FIGURE 3-1
Project Location
Wiley Canyon Project

3 - PROJECT DESCRIPTION

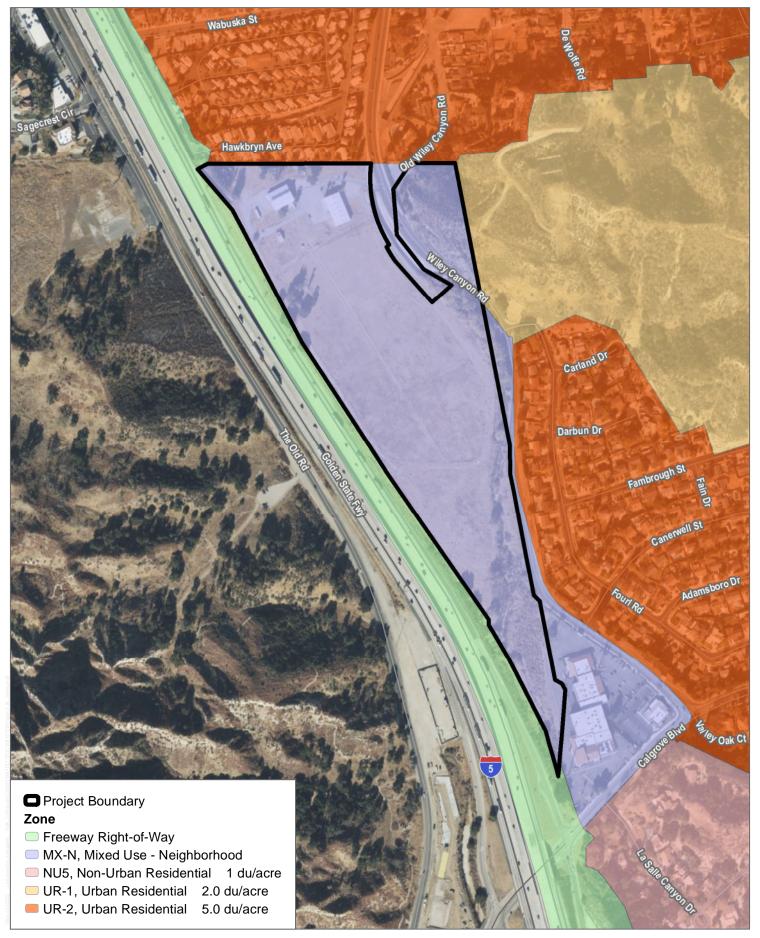


SOURCE: Bing Imagery 2022

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FIGURE 3-2A Existing Conditions

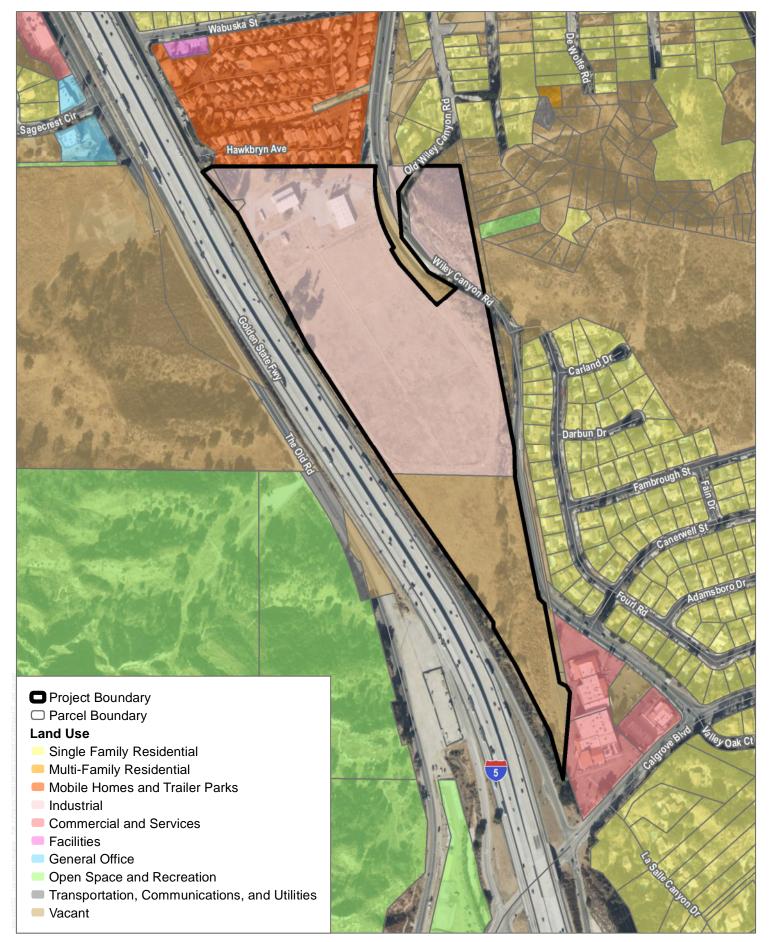
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SOURCE: Bing Imagery 2022, Santa Larita General Plan

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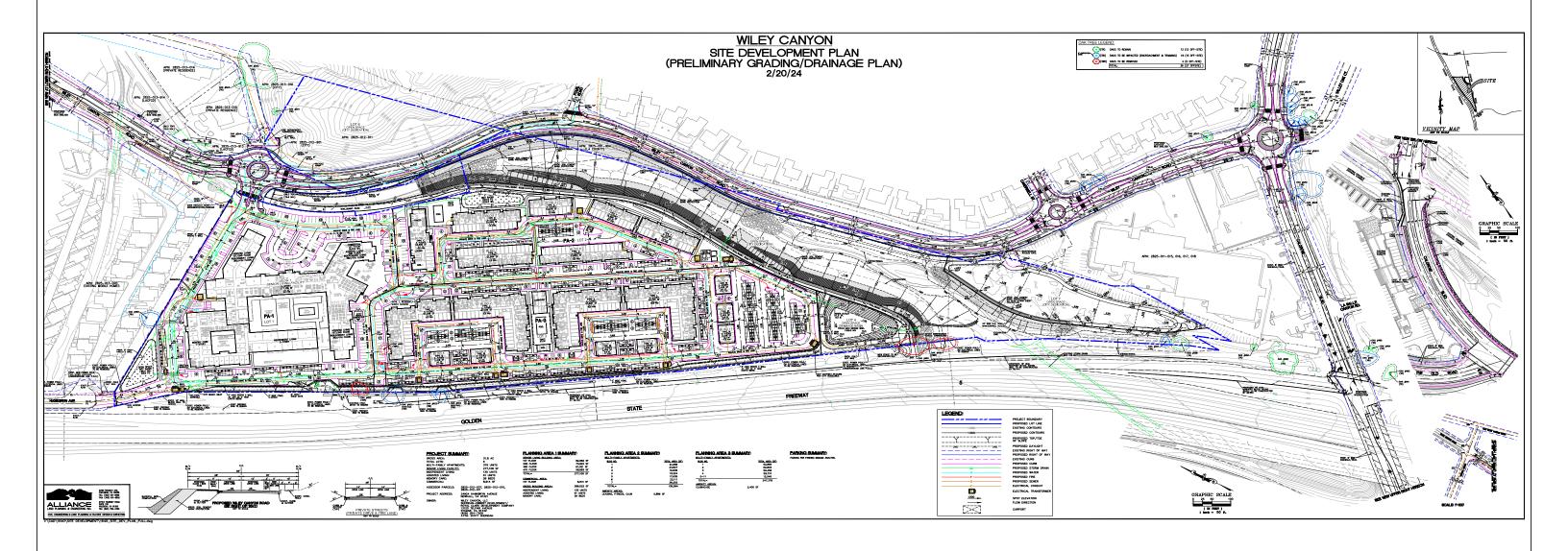
3 - PROJECT DESCRIPTION



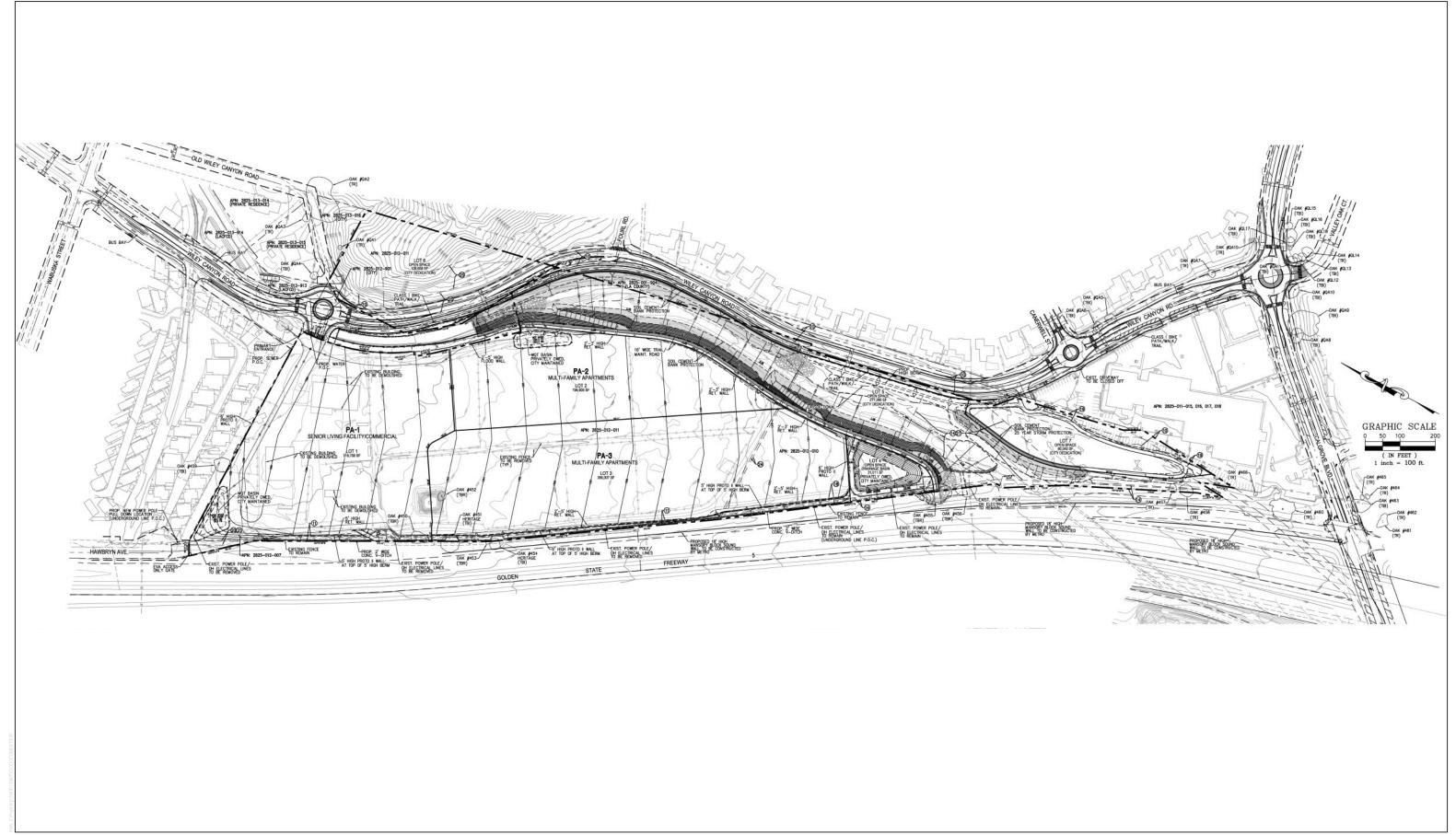
SOURCE: Bing Imagery 2022, SCAG Regional Land Use 2019



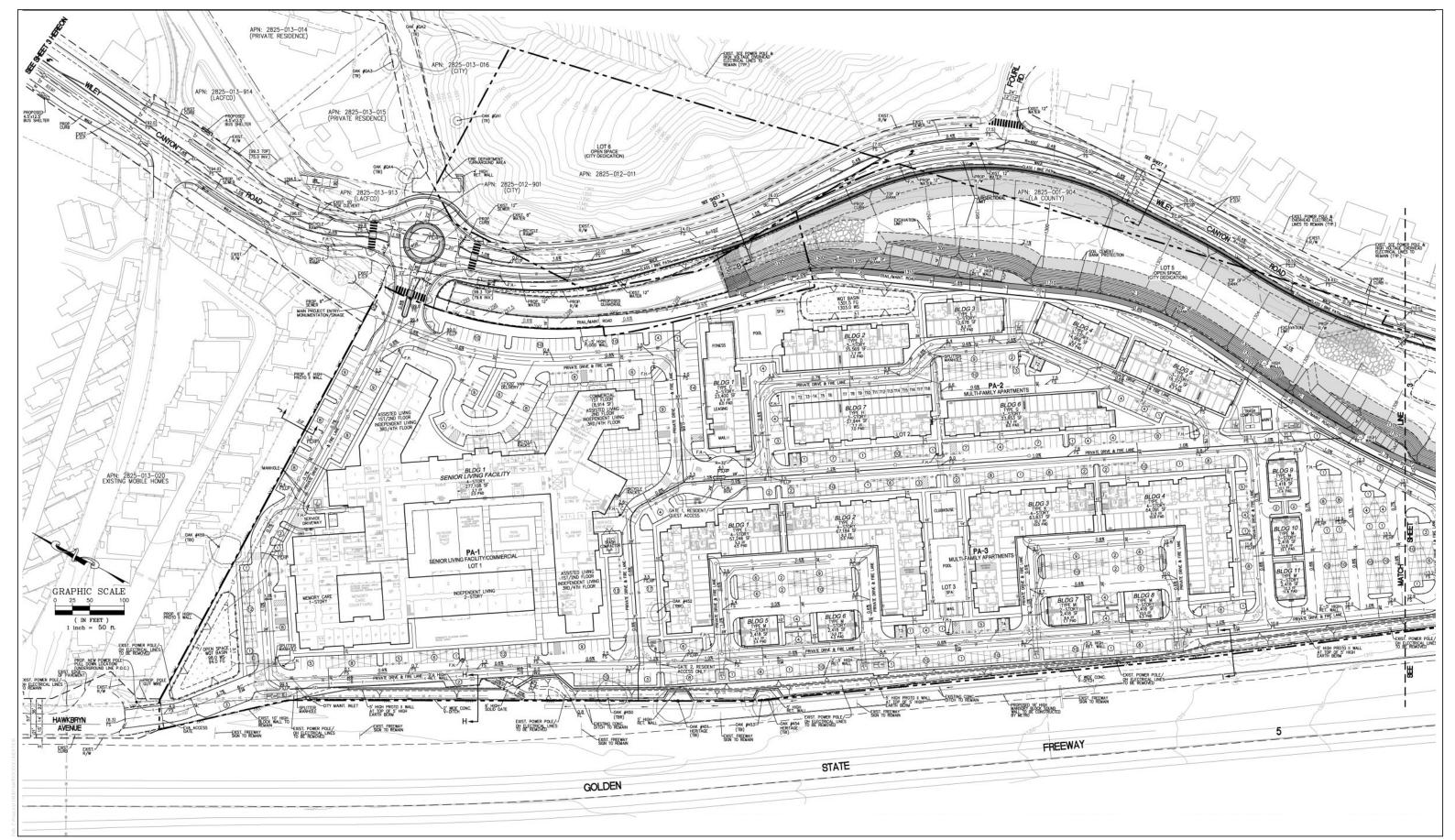
3 - PROJECT DESCRIPTION



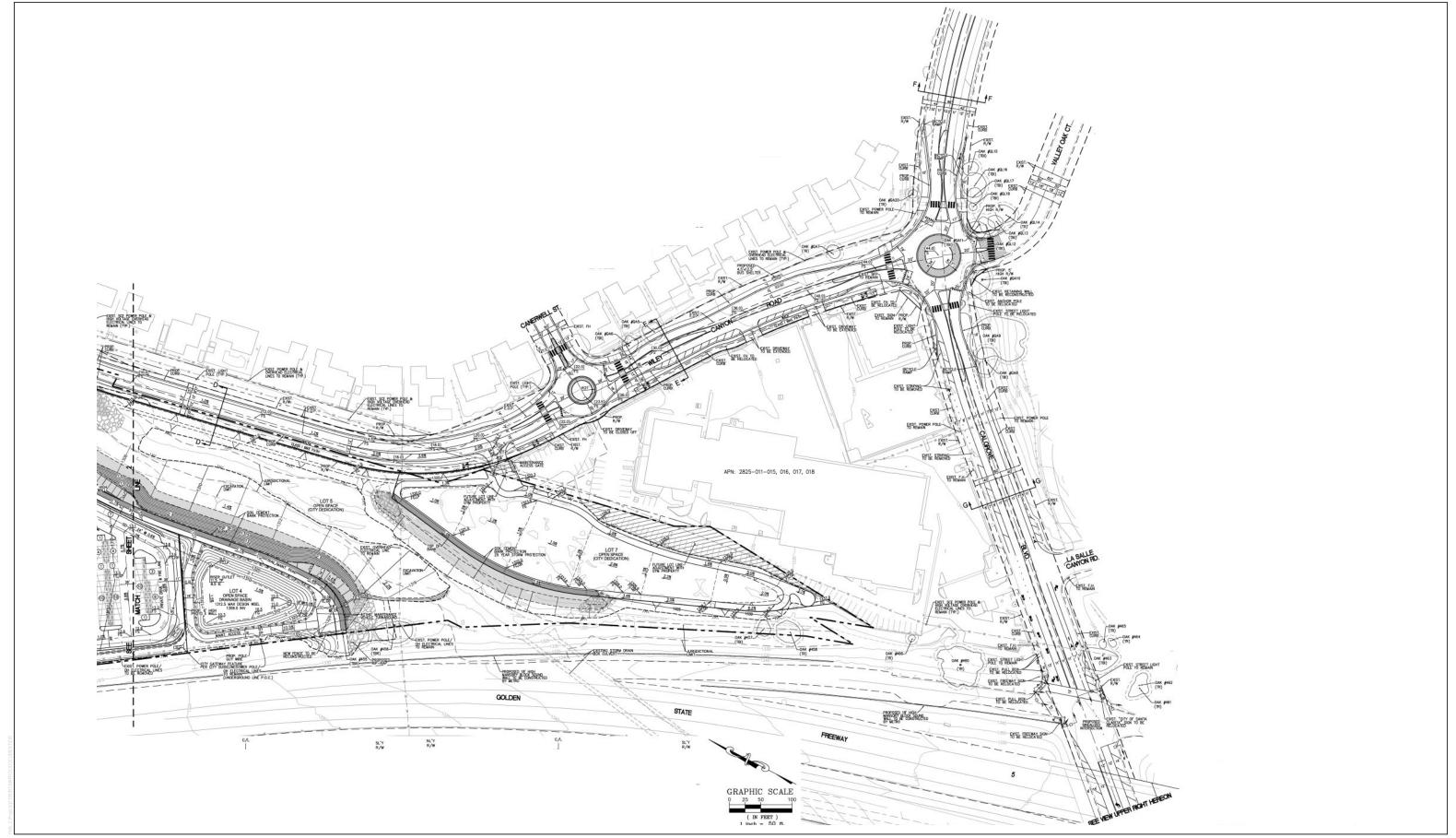
SOURCE: Alliance, 2024



SOURCE: Allianace Land Planning and Engineering Inc., 2024



SOURCE: Allianace Land Planning and Engineering Inc., 2024



SOURCE: Allianace Land Planning and Engineering Inc., 2024



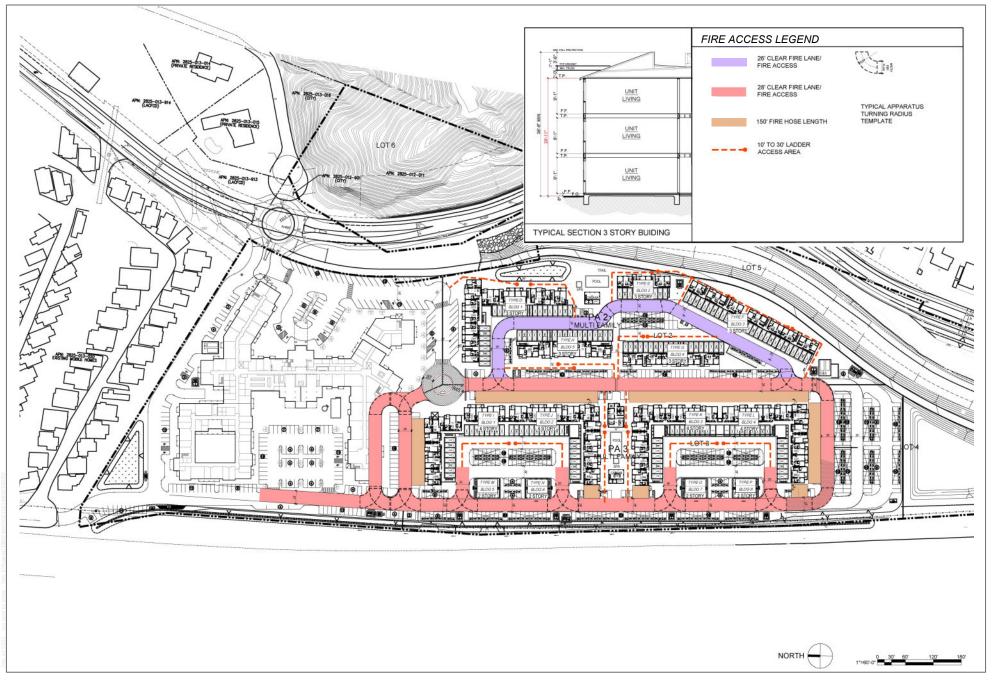


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3 - PROJECT DESCRIPTION



SOURCE: Oakridge Landscaping Inc., studio PAD Landscape Architecture

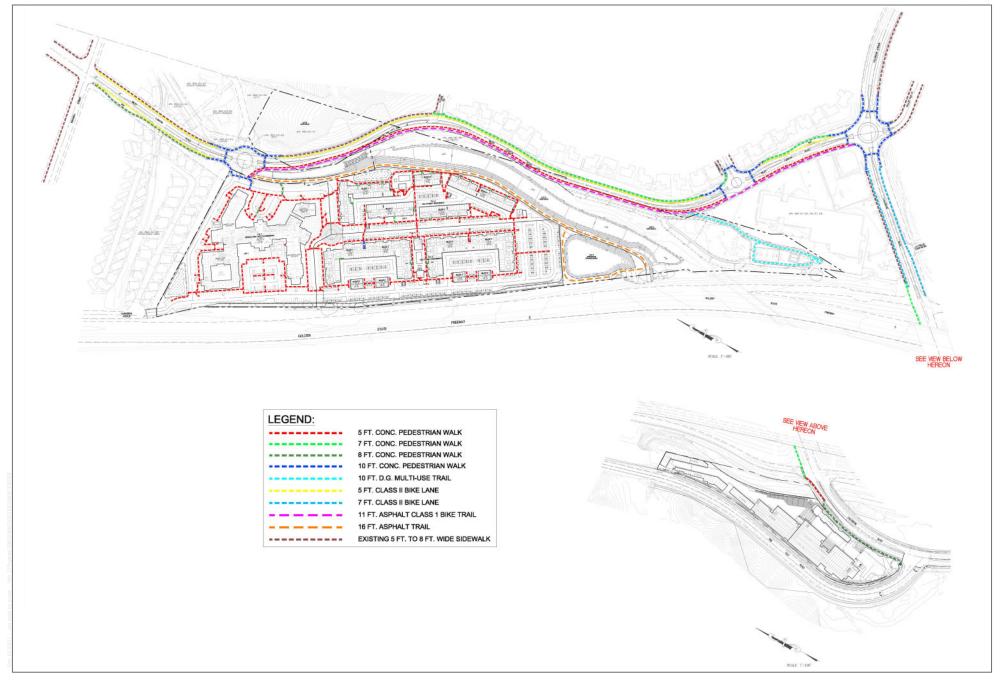


SOURCE: Architects Orange

FIGURE 3-7 Fire Access



3 - PROJECT DESCRIPTION



SOURCE: Alliance Land Planning and Engineering Inc.

FIGURE 3-8
Proposed Project Mobility Plan

3 - PROJECT DESCRIPTION

4 Environmental Impact Analysis

The purpose of this Draft Environmental Impact Report (EIR) is to evaluate the potential environmental effects of the proposed Wiley Canyon Project (project or proposed project). The City of Santa Clarita (City) circulated a Notice of Preparation (NOP) beginning on March 24, 2022, with the public review period ending on April 25, 2022. The NOP was transmitted to the State Clearinghouse, responsible agencies, other affected agencies, and other public and private potential stakeholders to solicit feedback regarding the scope of the environmental analysis to be addressed in the Project's EIR. The NOP and comment letters received are contained in Appendix A of this Draft EIR.

Sections 4.1 through 4.19 of the Draft EIR contain the potential environmental impacts analysis associated with the implementation of the project and focus on the following issues:

- Section 4.1 Aesthetics
- Section 4.2 Air Quality
- Section 4.3 Biological Resources
- Section 4.4 Cultural Resources
- Section 4.5 Energy
- Section 4.6 Geology and Soils
- Section 4.7 Greenhouse Gas Emissions
- Section 4.8 Hazards and Hazardous Materials
- Section 4.9 Hydrology and Water Quality
- Section 4.10 Land Use and Planning
- Section 4.11 Mineral Resources
- Section 4.12 Noise
- Section 4.13 Population and Housing
- Section 4.14 Public Services
- Section 4.15 Recreation
- Section 4.16 Transportation
- Section 4.17 Tribal Cultural Resources
- Section 4.18 Utilities and Service Systems
- Section 4.19 Wildfire

Technical Studies

Technical studies were prepared in order to accurately analyze air quality/greenhouse gas emissions, biological resources, cultural resources, geology and soils, hazards and hazardous materials, hydrology and water quality, noise and vibration, transportation, utilities and service systems, and wildfire impacts, and were used in the preparation of this EIR. These documents are identified in the discussions for the individual environmental issues and are included as technical appendices to the EIR. Hard copies are available at the City and on the City's website, www.santaclarita.gov.

Analysis Format

The Draft EIR assesses how the project would impact each of these issue areas. Each environmental issue addressed in this Draft EIR is presented in terms of the following subsections:

- Environmental Setting This subsection describes the physical environmental conditions in the vicinity of
 the proposed project at the time of publication of the NOP. The environmental setting establishes the
 baseline conditions by which the City will determine whether specific project-related impacts are significant.
- Regulatory Framework This subsection describes the laws, regulations, ordinances, plans, and policies
 applicable to the environmental issue area and the proposed project.
- Thresholds of Significance This subsection identifies a set of thresholds by which the level of impact is determined.
- Impact Analysis This subsection provides a detailed analysis regarding the environmental effects of the
 proposed project, and whether the impacts of the proposed project would meet or exceed the thresholds
 of significance.
- Mitigation Measures This subsection identifies potentially feasible mitigation measures that would avoid
 or substantially reduce significant adverse project impacts.
- Level of Significance After Mitigation This subsection discusses whether project-related impacts would be reduced to below a level of significance with implementation of the mitigation measures identified in the EIR. If applicable, this subsection also identifies any residual significant and unavoidable adverse effects of the proposed project that would result even with implementation of any feasible mitigation measures.
- Cumulative Effects This subsection discusses the cumulative effects of the project in combination with the effects of other projects in the vicinity.

In addition to the subsections listed above, full citations for all documents referred to in each environmental issue area discussion are included at the end of each section or chapter.

4.1 Aesthetics

This section describes the existing visual setting of the proposed Wiley Canyon Project (project) site and vicinity including the availability of public views, identifies applicable regulatory requirements, and evaluates potential impacts related to implementation of the proposed project. The analyses in this section are largely based on information obtained from the Santa Clarita General Plan, and the City's Community Character Guidelines (Santa Clarita 2009).

Aesthetics Concepts and Terminology

Scenic Vistas

A scenic vista is a unique view or panorama that characterizes and adds aesthetic value to a location. Scenic vistas can include long and broad views of mountain ranges, skylines, cityscapes, and, often, the ocean or other prominent bodies of water. Scenic vistas are characterized by features such as natural open spaces, topographic formations, or other landscapes that contribute to the visual quality of a specific area.

Visual Character

The visual character of a project site is determined by the distinct physical characteristics that distinguish the project site and its surroundings. For example, natural prevailing topography, site-specific vegetation, and buildings or other development all compose the visual character of a place or project site.

Visual Quality

The visual quality of a project site refers to the general cohesiveness and conformity of the visual characteristics as determined from a viewer's perspective. Factors that determine visual quality include unity, intactness, scenery, organization, form, color, and texture. Visual quality may be degraded by the existence, or addition, of infrastructure or elements that are not visually compatible with the project site and the surrounding location. For example, introducing aboveground electricity poles that obstruct a previously clear, dramatic mountain view would be considered a degradation of the visual quality of a project site. Low visual quality is usually associated with disorganized or chaotic views that appear random or discordant in nature.

Views

- Viewing scene/view: What a person sees when they look at a particular scene
- Viewing location: The place from which a viewer observes the viewing scene
- View corridor: The volume of space between the viewing location and the viewing scene

Viewer Sensitivity

Viewer sensitivity is a measure of people's perception of an existing or proposed view. The type of land use, the density of a land use, adjacent land uses, and scenery usually affect viewer sensitivity. For example, residents living in an area tend to have higher viewer sensitivity, whereas hikers commonly have low to moderate viewer sensitivity due to the short duration and transient nature of views from hiking trails.

Viewshed

A viewshed is the area visible from an observer's perspective. Viewsheds are usually most comprehensive when they include scenic vistas or unobstructed views of expansive landscape components. Viewsheds include the underlying topography (e.g., ridgelines, hillsides etc.) and the associated land cover (e.g., large trees, scrub, and exposed soil).

Light and Glare

For the purposes of this Draft EIR, "light" refers to the degree of brightness generated by a given source. Light may be direct (e.g., from an elevated city streetlamp) or indirect (e.g., light produced from an illuminated piece of reflective material). When light is cast sideways or outwards to the extent that it spills onto neighboring land uses, it can be considered a nuisance or a form of visual pollution. Similarly, nighttime lighting that is poorly placed, including street lighting and spot lighting, may also adversely affect sensitive receptors, especially those who are disturbed (e.g., disrupted sleep) by bright light.

"Glare" specifically refers to focused, intense light that is either directly produced from a source or indirectly cast from a reflective surface. Daytime glare is typically associated with bright sunlight reflecting off broad widths of materials such as glass, steel, and asphalt.

4.1.1 Environmental Setting

Visual Character and Quality

Regional Overview

Per the General Plan, the City is surrounded by the Traverse Mountain Ranges, which comprises the Santa Susana Mountains to the south and west, the San Gabriel Mountains to the southeast, and the Sierra Pelona Mountains to the north. Well-defined ridgelines, slopes, and canyons provide a visual backdrop to urban portions of the City, create a sense of place for each neighborhood or district, and provide opportunities for residents throughout the Santa Clarita Valley to experience the natural environment (City of Santa Clarita 2011a). Additionally, the City and general regional planning area are bordered by the Angeles National Forest to the north and south, which forms a natural greenbelt and enhances the visual quality of views within the planning area.

Community Overview

As discussed in the General Plan, the mountains surrounding the Santa Clarita Valley provide a sense of form and containment. Well-defined ridgelines, slopes and canyons provide a visual backdrop to the urban environment. Foothill and canyon zones are important scenic resources that, because of inherent slope constraints, have remained undeveloped and support a variety of natural habitats. Wiley Canyon is considered a scenic resource within the General Plan. Wiley Canyon forms a portion of the pass-through which Interstate 5 (I-5) passes as it enters the Santa Clarita Valley from the south. The upper reaches of the canyon provide a sense of enclosure and include views of scrub-filled hillsides and stands of oak trees, while the northerly portion of the canyon offers expansive views of the valley (City of Santa Clarita 2011a). The general terrain is surrounded by ridgelines to the east and west, including a portion of the project site.

Project Site and Surrounding Land Uses Overview

Visual Character and Quality

The project site is located in the southwestern portion of the City's municipal boundaries, east of I-5, as shown in Figure 3-1, Project Location. According to Exhibit CO-1, Hillsides and Ridgelines, of the General Plan, the project site's vicinity is characterized by slopes between 0%-10% and 11%-15% (City of Santa Clarita 2011a). These slopes are associated with the foothills of the Santa Susana Mountains. With the exception of the elevated hillside area at the northeast portion of the project site, east of Wiley Canyon Road, the site topography is relatively flat. The elevations on the site range from a high point of 1,402 feet at the hillside area to a low point of 1,290 feet located within the drainage channel near where the channel bottom transitions to concrete liner. The elevations of the relatively flat field area of the site range from approximately 1,321 feet at the south to 1,297 feet near the site access driveway (Appendix E).

The project site consists of approximately 31.8 acres of vacant land located at 24924 Hawkbryn Avenue, bordered by I-5 to the west, Wiley Canyon Road to the east, Hawkbryn Avenue to the north, and Calgrove Boulevard to the south, within the Newhall area of the City. The project site is currently vacant with the exception of two single-story metal buildings, two mobile homes, former mule barns, and one drained, man-made water basin associated with the former Smiser Mule Ranch which historically occupied the site. Ruderal vegetation, grass, brush, and trees (including oak trees) cover the majority of the site.

The project site is surrounded by urban and suburban development, and vacant land. A mobile home development, known as the Mulberry Mobile Home Park, borders the site to the north. Wiley Canyon Road bisects a portion of the project site as well as adjacent residential neighborhoods to the east of the site. A tributary to the Santa Clara River (also known as the South Fork of the Santa Clara River) runs north-south along the east side of the project site. This drainage contains heavy vegetation that blocks the project site from western views from Wiley Canyon Road. To the south of the project site is a commercial area. The I-5 freeway borders the site to the west, separated from the project site by a chain-linked fence.

Sources of daytime and nighttime light and glare on the project site and in the surrounding area are generally low, given the undeveloped nature of the project site. However, closer to the existing residential and commercial uses, lights and associated glare contribute to the night lighting environment.

Scenic Vistas

The General Plan Conservation and Open Space Element does not specifically list any local scenic vistas. However, because the City is aesthetically characterized by expansive views of the surrounding hillsides and mountains, these landforms would be considered important components of the City's scenic vistas.

Panoramic views of the hillsides and mountains are available from both high and low elevations on the project site. For example, the Santa Susana Mountains are visible from the project site to the west/southwest and the San Gabriel Mountains are visible to the southeast. Although available views of the surrounding mountains and ridgelines are expansive and panoramic, the quality of the views varies by location, elevation, and presence of intervening features between the observer and visual element of interest.

Wiley Canyon Road provides a potential public vantage point for scenic views to hillsides and mountains. However, the quality of the views from the road near the project site is low due to intervening residential land uses, the I-5

freeway, aboveground utility infrastructure, and vegetation. As such, from Wiley Canyon Road, hillsides and mountains are regularly obscured by foreground elements and views are typically narrow and short.

4.1.2 Regulatory Framework

State

State Scenic Highways

The California Department of Transportation's State Scenic Highway System includes a list of designated and eligible state scenic highways. There are two eligible state scenic highways in the City of Santa Clarita, (a) Interstate 5 from Interstate 210 near Tunnel Station to SR-126 near Castaic and (b) SR-126 from SR-150 near Santa Paula to Interstate 5 near Castaic (Caltrans 2019). The eligible segment of the I-5 freeway is adjacent to the project site. However, neither of these highways are officially designated (Caltrans 2019).

Local

City of Santa Clarita General Plan

Land Use Element

The General Plan Land Use Element (City of Santa Clarita 2011b) outlines specific policies pertaining to the protection of scenic resources. Those policies applicable to the proposed project are included below and analyzed in Section 4.10, Land Use and Planning, of this EIR.

- Goal LU 1: An interconnected Valley of Villages providing diverse lifestyles, surrounded by a greenbelt of natural open space.
 - Policy LU 1.1.4: Preserve community character by maintaining natural features that act as natural boundaries between developed areas, including significant ridgelines, canyons, rivers and drainage courses, riparian areas, topographical features, habitat preserves, or other similar features, where appropriate.
 - Policy LU 1.3.2: Substantially retain the integrity and natural grade elevations of significant natural ridgelines and prominent landforms that form the Valley's skyline backdrop.
 - Policy LU 1.3.3: Discourage development on ridgelines and lands containing 50% slopes so that these areas are maintained as natural open space.
- Goal LU 6: A scenic and beautiful urban environment that builds on the community's history and natural setting.
 - Policy LU 6.1.3: Ensure that new development in hillside areas is designed to protect the scenic backdrop of foothills and canyons enjoyed by Santa Clarita Valley communities, through requiring compatible hillside management techniques that may include but are not limited to clustering of development; contouring and landform grading; revegetation with native plants; limited site disturbance; avoidance of tall retaining and build-up walls; use of stepped pads; and other techniques as deemed appropriate.

- Policy LU 6.2.1: Promote the inclusion of plazas, courtyards, seating areas, public art, and similar features within commercial centers, business parks, and civic facilities visited by the general public.
- Policy LU 6.2.2: Provide and enhance trail heads where appropriate with landscaping, seating, trash receptacles and information kiosks.
- Policy LU 6.3.4: Require undergrounding of utility lines for new development where feasible, and plan for undergrounding of existing utility lines in conjunction with street improvement projects where economically feasible.
- Policy LU 6.5.1: Require use of high quality, durable, and natural-appearing building materials pursuant to applicable ordinances.
- Policy LU 6.5.2: Encourage the use of designs and architectural styles that incorporate classic and timeless architectural features.
- Policy LU 6.5.3: Require architectural enhancement and articulation on all sides of buildings (360-degree architecture), with special consideration at building entrances and corners, and along facades adjacent to major arterial streets.
- Policy LU 6.5.4: Evaluate new development in consideration of its context, to ensure that buildings create a coherent living environment, a cohesive urban fabric, and contribute to a sense of place consistent with the surrounding neighborhoods.

Conservation and Open Space Element

The General Plan Conservation and Open Space Element (City of Santa Clarita 2011a) outlines specific policies pertaining to the protection of scenic resources. Those policies applicable to the proposed project are included below and analyzed in Section 4.10 of this EIR.

- Goal CO 6: Preservation of scenic features that keep the Santa Clarita Valley beautiful and enhance quality of life, community identity, and property values.
 - Policy CO 6.1.1: Protect scenic canyons, as described in Part I of this element, from overdevelopment and environmental degradation.
 - Policy CO 6.1.2: Preserve significant ridgelines, as shown on the Exhibit CO-7, as a scenic backdrop throughout the community by maintaining natural grades and vegetation.
 - Objective CO 6.2: Protect the scenic character of view corridors.
 - Policy CO 6.2.1: Where feasible, encourage development proposals to have varied building heights to maintain view corridor sight lines.
 - Objective CO 6.4: Protect the scenic character of oak woodlands, coastal sage, and other habitats unique to the Santa Clarita Valley.

- Policy CO 6.4.1: Preserve scenic habitat areas within designated open space or parkland, wherever possible.
- Policy CO 6.4.2: Through the development review process, ensure that new development preserves scenic habitat areas to the extent feasible.
 - Objective CO 6.6: Limit adverse impacts by humans on the scenic environment.
- Policy CO 6.6.1: Enhance views of the night sky by reducing light pollution through use of light screens, downward directed lights, minimized reflective paving surfaces, and reduced lighting levels, as deemed appropriate by the reviewing authority.
- Policy CO 6.6.2: Improve views of the Santa Clarita Valley through various policies to minimize air pollution and smog, as contained throughout the General Plan.
- Policy CO 6.6.4: Where appropriate, require new development to be sensitive to scenic viewpoints or viewsheds through building design, site layout and building heights.
- Policy CO 6.6.5: Encourage undergrounding of all new utility lines, and promote undergrounding of existing lines where feasible and practicable.

Community Character and Design Guidelines

The City's Community Character and Design Guidelines (Design Guidelines) establish the planning principles for the City with the intent of retaining and encouraging architectural variety and promoting quality development (City of Santa Clarita 2009). The Design Guidelines are applicable to the aesthetic value of the proposed project, specifically in ensuring that the project meets the following ideals:

- Is compatible in size, scale, and appearance with the character of Santa Clarita
- Is attractive and an asset to the community
- Preserves and enhances natural features of a site
- Incorporates quality articulation, community character features, multiple building forms, desirable building details, and other elements that display excellence in design
- Provides pedestrian-oriented design to enrich the pedestrian experience
- Includes pedestrian friendly amenities such as pedestrian connections, plazas, seating, bike racks, fountains, and other similar features for the enjoyment of the community and visitors
- Promotes the use of high-quality materials
- Promotes well-landscaped parking lots with efficient pedestrian and vehicular circulation
- Provides suggestions for ways to improve the environmental performance of projects through the strategic incorporation of green building components

As a mixed use project, the proposed project would apply to the standards set in place for "mixed use" development as well as any relevant guidelines for residential and commercial portions. The Mixed Use Development guidelines incorporate overall design policies as well as policies governing security, pedestrian-oriented development, public space, on-site parking, and utilitarian aspects (City of Santa Clarita 2009).

Santa Clarita Municipal Code

The SCMC includes established development standards that regulate development activities within the city. SCMC sections regulating design standards include the following:

- Section 17.51.040, Oak Tree Preservation: Oak trees define the visual character of the City, and thus, are considered a natural and aesthetic resource. The Oak Tree Preservation regulations outlines the requirements pertaining to the protection and preservation of oak trees in the City, including regulations for cutting, damage, and encroachment on oak trees and oak woodlands.
- Section 17.51.050, Outdoor Lighting Standards: The outdoor lighting standards are intended to permit the reasonable use of outdoor lighting for nighttime safety, utility, security, productivity, enjoyment, and commerce, while conserving energy to the greatest extent possible and minimizing off-site light trespass and glare. Per SCMC Section 17.51.50, the general requirements set forth for the City's lighting standards include the following:
 - Shielding. All lighting must be directed downward and be of a cut-off design so the luminary and/or lens do not protrude below the luminary housing and are not visible from a public right-of-way.
 - Light Trespass. Lighting may not illuminate other properties and be directed downward to prevent offsite glare.
 - Appurtenances. Lighting must be operated so that it does not disturb the peace, quiet, and comfort of adjacent, neighboring uses, and shall be screened and/or shielded from surrounding properties and streets.
 - Lighting Plan. Except for new and additions to single-family residences, applications for new buildings and building additions and proposed modifications must include the location, fixture type, fixture height, and photometric information of all outdoor lighting and information about shut-off timers and hours of operation for outdoor lighting where required by this section for review and approval by the Community Development Director.
- Section 17.55.020, Mixed Use Development Standards: The purpose of this section is to provide property development standards to all properties and structures permitted within mixed use zones. These regulations encourage a mix of complementary residential and nonresidential uses in a manner that promotes healthy and walkable communities.
 - Building Height. Buildings and structures in the MXN zone may be permitted and cannot exceed a height of fifty (50) feet.
 - Commission Review. Mixed use developments that are one hundred thousand (100,000) square feet or more in gross floor area, along major highways or at key intersections identified in the circulation element of the General Plan require a public hearing and Planning Commission review and approval.
 - Outdoor Space. Regulations governing open space include, without limitation, the following:
 - Active recreation and passive leisure space should be provided for each residential-only or mixed use project containing residential uses.
 - Public spaces are required and may include, without limitation, outdoor areas such as plazas, outdoor dining areas, rooftop gardens, and landscaped areas designed for active or passive use.
 - The applicant may provide off-site outdoor space amenities or in-lieu fees to satisfy the outdoor space requirements.

- Landscaping must be provided in outdoor space and common areas throughout the mixed use development.
- Section 17.55.040, Architectural and Design Standards: These provisions are subject to review by the Planning Commission and include, without limitation, the following:
 - Architectural Standards. Regulations governing architecture include, without limitation, the following:
 - Development must comply with the City's Community Character and Design Guidelines.
 - Building materials must be high quality, durable, and natural-appearing.
 - Buildings must be oriented along street frontage. Where multiple buildings are planned in a mixed use development, the structures should be of varying heights to create visual interest from the street.
 - For mixed use projects that are over two stories in height, portions of the upper stories should be recessed from the front facade to reduce the overall massing of the building and to create varied building heights and sight lines.

4.1.3 Thresholds of Significance

The significance criteria used to evaluate the project impacts to aesthetics are based on Appendix G of the CEQA Guidelines. According to Appendix G of the CEQA Guidelines and except as provided in Public Resources Code, Section 21099, a significant impact related to aesthetics would occur if the project would:

- 1. Have a substantial adverse effect on a scenic vista.
- 2. Substantially damage scenic resources, including, without limitation, trees, rock outcroppings, and historic buildings within a state scenic highway.
- 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 points.) If the project is in an urban area, conflict with applicable zoning and other regulations governing scenic quality.
- 4. Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area.

Additionally, the City's Local Guidelines include the following additional City-specific threshold related to aesthetics, in which a significant impact would occur if the project would result in (City of Santa Clarita 2005):

5. Changes to the topography of a Primary or Secondary Ridgeline.

4.1.4 Impact Analysis

Threshold AES-1: Would the project have a substantial adverse effect on a scenic vista?

The General Plan Conservation and Open Space Element does not specifically list any local scenic vistas; however, because the City is aesthetically characterized by expansive views of the surrounding hillsides and mountains, these landforms would be considered important components of the City's scenic vistas (City of Santa Clarita 2011a). Scenic vistas within the project site's vicinity include the Santa Susana Mountains to the west/southwest and the

San Gabriel Mountains to the southeast. Panoramic views of minor ridgelines are also visible within the vicinity of the project site.

For the purposes of CEQA, scenic vistas are typically public vantage points such as a public roadway. Although clear views of these scenic vistas are available from various locations on and around the project site, the view locations are predominantly private and comprise private residential properties. The obstruction of only a few private views is not generally considered a significant effect under CEQA. The panoramic views available from the privately held views are not considered in this EIR and analysis. As such, public views, particularly from Wiley Canyon Road, were used to analyze the potential to substantially degrade or otherwise impair the quality of public views.

Wiley Canyon Road provides a potential public vantage point for scenic views to hillsides and mountains. However, the quality of the views from the road near the project site is low due to intervening residential land uses, the I-5 freeway, aboveground utility infrastructure, and vegetation. As such, hillsides and mountains are regularly obscured by foreground elements and views from Wiley Canyon Road are typically narrow and short. In addition, Wiley Canyon Road changes in elevation, and views vary in direction along the road's curvature. Construction of the project would result in grading activities. Under existing conditions, the project site west of Wiley Canyon Road is relatively flat. The proposed grading activities would not result in substantial import of soil onto the site such that the existing grade would substantially change the elevation of the site or views relative to existing conditions. Once operational, the proposed structures would not exceed 50 feet. Although the introduction of structures associated with the proposed project would change the views from Wiley Canyon Road, the height of the proposed project would not substantially obstruct the distant views of the surrounding ridgelines to the west.

According to Exhibit CO-9 of the General Plan, a trail system exists to the west of the project site (City of Santa Clarita 2011a). The trailhead to the Taylor Trail Wilderness and Open Space Area is located west of The Old Road and the I-5 freeway in unincorporated Los Angeles County. At this location, publicly accessible views of the project site are available as well as views of the foothills surrounding the project site to the east. As mentioned above, the proposed structures would not exceed 50 feet. Thus, construction of the project would not substantially obstruct views of the distant mountain terrain or the associated foothills. Moreover, expansive views of the surrounding ridgelines would not be obstructed by the project at a higher elevation from the trail. In addition, the project would not result in changes to the elevated hillside portion of the project site east of Wiley Canyon Road.

Given that existing views encompass developed uses and expansive views are regularly obscured by foreground elements, that the maximum building heights would not exceed 50 feet, and that from neighboring areas views would remain intact, development on the project site would not substantially alter the existing quality of available views of scenic vistas. Therefore, the project would result in **less than significant impacts** on scenic vistas. No mitigation is required.

Threshold AES-2: Would the project substantially damage scenic resources, including, without limitation trees, rock outcroppings, and historic buildings within a state scenic highway?

There are no officially designated state scenic highways within the project site's vicinity (Caltrans 2019). However, a segment of the I-5 freeway adjacent to the project site is eligible (Caltrans 2019). The project site is visible from the freeway, and scenic resources within view of the corridor include grassland, shrubland, and the foothills surrounding the site. Views from the freeway onto the project site are periodically obstructed by existing oak trees on site and other vegetation. However, views beyond the project site to the east contain intervening residential land uses, aboveground utility infrastructure, and roadways. Metro has plans to construct an 18-foot sound wall between I-5 and the project site, which would ultimately reduce visibility of the project site from the I-5. The project would

not result in changes to the elevated eastern portion of the project site. Moreover, scenic resources such rock outcroppings do not exist on site. While the project site does contain potentially scenic resources such as oak trees, including two heritage oaks, and historic-age structures, the potential project-related impacts specific to these resources are analyzed throughout this EIR. While development of the project site would alter the character of the project site and immediate vicinity within the I-5 corridor, this segment of the freeway is not an officially designated state scenic highway, impacts would be **less than significant**, and no mitigation is required.

Threshold AES-3: In non-urbanized areas, would the project 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 points.)? If the project is in an urban area, would the project conflict with applicable zoning and other regulations governing scenic quality?

The project site is located within an urbanized area within the vicinity of residential and commercial land uses. Public Resources Code (PRC) Section 21071 defines an "urbanized area" as "(a) an incorporated city that meets either of the following criteria: (1) Has a population of at least 100,000 persons, or (2) Has a population of less than 100,000 persons if the population of that city and not more than two contiguous incorporated cities combined equals at least 100,000 persons." As further discussed in Section 4.13, Population and Housing, of this EIR, the U.S. Census Bureau recorded 228,673 residents in the City in April 2020 (Census 2022). The project site is located within an incorporated city that has a population of at least 100,000 persons for purposes of Public Resources Code section 21071. Therefore, the following discussion is based on the project's ability to not conflict with applicable zoning and other regulations governing scenic quality.

Applicable zoning regulations governing scenic quality include but are not limited to the City's development standards such as setbacks, open space requirements, and height limits outlined within the Santa Clarita Municipal Code. As described in Chapter 3, Project Description, of this EIR, the project would result in the development of a senior living facility, multifamily residential apartments, commercial and recreational uses, and infrastructure improvements on and off site. The project requests the approval of a tentative map, grading permit, conditional use permit, minor use permit, and oak tree permit, all of which are required for implementation of the project as proposed. Project consistency with SCMC Section 17.55.020, Mixed Use Development Standards, is further analyzed in Section 4.10, Land Use and Planning. Moreover, the project site contains oak trees, which are considered an aesthetic resource and protected under the SCMC Sections 17.23.170 and 17.51.040, Oak Tree Preservation (and Resolution No. 90-177, adopted September 11, 1990). The Oak Tree Preservation regulations govern the protection and preservation of oak trees in the City, including regulations for cutting, damage, and encroachment upon oak trees and oak woodlands. The project's consistency with the Oak Tree Preservation regulations is further detailed in Section 4.3, Biological Resources. In addition, and as detailed above in Section 4.1.2, Regulatory Setting, the City's General Plan Land Use Element and the City's Conservation and Open Space Element outline specific policies pertaining to the protection of scenic resources. These policies applicable to the proposed project are included above and analyzed further in Section 4.10, Land Use and Planning, of this EIR to determine the project's consistency with a land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect.

Among the other required approvals, the project is required to comply with the City's architectural design review and subject to the provisions outlined in SCMC Section 17.55.040, Architectural and Design Standards. As shown, mixed use developments such as the proposed project are required to comply with the City's Community Character and Design Guidelines (Design Guidelines), which establish the planning principles for retaining and encouraging architectural variety and promoting quality development (City of Santa Clarita 2009). The Design Guidelines are

applicable to the aesthetic value of the proposed project, specifically in ensuring that the project meets the following ideals shown in Table 4.1-1, Project Consistency with the Community Character and Design Guidelines, below.

Table 4.1-1. Project Consistency with the Community Character and Design Guidelines

No.	Goal	Discussion			
Overa	Overall Guidelines				
1	Is compatible in size, scale, and appearance with the character of Santa Clarita	Consistent. The proposed project would result in a scale and size that is compatible with the City of Santa Clarita in general; however, the project would result in development on a primarily undeveloped site. The appearance of the proposed project would be generally consistent with the visual character of the community and surrounding area, including:			
		 Building materials would complement the surrounding area by incorporating Spanish-style architecture design features and associated project elements Outdoor lighting would be unobtrusive, positioned away from residential land uses, concealed in landscaped areas, and downlighted. These measures would serve to spread and diffuse light and glare. 			
2	Is attractive and an asset to the community	Consistent. The proposed project would be designed to complement the visual character of the community and surrounding area. The project would provide a senior living facility and multifamily apartments with recreational space for public use. Additionally, the project would provide approximately 90 employment opportunities to the City, thereby enhancing the economic opportunity in the area.			
3	Preserves and enhances natural features of a site	Consistent. Although the project would redevelop the vacant site, the project would preserve and enhance existing resources such as the oak trees on site through with compliance with the City's Oak Tree Preservation Ordinance and preservation of the creek that traverses the site (see Section 4.3, Biological Resources).			
4	Incorporates quality articulation, community character features, multiple building forms, desirable building details, and other elements that display excellence in design	Consistent. The proposed project would incorporate articulation, community character features, multiple building forms, desirable building details, and other elements that display excellence in design, as follows:			
		The project would include a variety of building forms, ranging from a four-story senior living facility to three- and four-story apartments. All buildings would incorporate similar architectural styles featuring varying levels of white, beige, and dark colors.			

Table 4.1-1. Project Consistency with the Community Character and Design Guidelines

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No.	Goal	Discussion		
		 Building materials would complement the surrounding area by incorporating Spanish-style architecture design features and associated project elements. Outdoor lighting would be unobtrusive, positioned away from residential land uses, concealed in landscaped areas, and downlighted. These measures would serve to spread and diffuse light and glare. 		
5	Provides pedestrian-oriented design to enrich the pedestrian experience	Consistent. The proposed project would provide a pedestrian-oriented design to enrich the pedestrian experience, as follows:		
		 The project proposes active and passive on-site recreational facilities, including approximately 7,040 linear feet (1.3 miles) of pedestrian trails throughout the site and along Wiley Canyon Road. Off-site infrastructure improvements are proposed along Wiley Canyon Road which are designed to enhance safety with new roundabouts, Classes I and II bicycle paths, and sidewalks. Pedestrian sidewalks are proposed throughout the senior living facility and multifamily residential components of the project site. 		
6	Includes pedestrian friendly amenities such as pedestrian connections, plazas, seating, bike racks, fountains, and other similar features for the enjoyment of the community and visitors	Consistent. See the analysis for Goal No. 5.		
7	Promotes the use of high-quality materials	Consistent. See the analysis for Goal No. 1 and Goal No. 4.		
8	Promotes well-landscaped parking lots with efficient pedestrian and vehicular circulation	Consistent. The project would include on-site (off-street) parking for both the senior living and multifamily residential areas of the site. A total of 162 parking stalls would be provided, consistent with the parking requirements for each component of the senior living facility. In addition, the senior living facility would include 57 visitor stalls for a total of 219 stalls. The residential component of the project would include 713 total parking stalls, including 197 parking spaces within garages, 406 parking spaces within carports, and 110 guest parking spaces. The project site would include landscaping throughout each project component, including parking lots on site. A total of 450 newly planted trees are proposed. Landscaping would be used to screen certain facilities on site, such as transformers and maintenance buildings. In addition, the project would		

Table 4.1-1. Project Consistency with the Community Character and Design Guidelines

No.	Goal	Discussion
		utilize landscaping for proposed fuel modification zones. See also the analysis for Goal No. 6.
9	Provides suggestions for ways to improve the environmental performance of projects through the strategic incorporation of green building components	Consistent. The project would be designed in accordance with the California Building Standards Code and Santa Clarita Municipal Code requirements, as applicable. Additionally, the project would employ a number of energy and water efficiency features, air quality and greenhouse gas emission reduction features, and general project design features to reduce the potential for adverse environmental effects, including, without limitation the following:
		 The project would include the installation of ENERGY STAR compliant appliances and equipment, including ENERGY STAR compliant bathroom fans in residential units and water fixtures. All structures would meet applicable energy standards delineated in the Building Energy Efficiency Standards and CALGreen Code, or applicable version at the time of building permits are issued. The project would provide accessible and electric vehicle parking per City and CALGreen Code requirements. The project would install Classes I and II bicycle paths off site as well as provide bicycle parking on site.
Mixed	Use Overall Design Guidelines	
1	On the Land Use Map, integrate land use districts in a manner that promotes healthy, walkable communities by providing an appropriate mix of residential, employment, and service uses in proximity to each other.	Consistent. The proposed project would consist of a senior living facility, associated commercial uses, multifamily residences, and recreational areas. Each component of the project site would be supported by on- and off-site sidewalks and trails for pedestrian use which would be designed to connect the proposed development to the surrounding community.
2	New buildings should draw upon the fundamental architectural characteristics of existing buildings in the four communities within Santa Clarita.	Consistent. The project site is located within the Wiley Canyon neighborhood of Newhall, one of the four communities within the City. The proposed project would result in a scale and size that is compatible with Newhall and the City of Santa Clarita in general yet would result in development of a primarily undeveloped site. For example, the appearance of the proposed project would incorporate Spanish-style architecture design features and associated project elements.

Table 4.1-1. Project Consistency with the Community Character and Design Guidelines

No.	Goal	Discussion
3	All facades should be given equal design consideration.	Consistent. The project's design would be subject to review by the City's Planning Commission in accordance with SCMC Section 17.55.020, Mixed Use Development Standards. These regulations would ensure that all facades are given equal design consideration. In addition, the project is subject to the Commission's review as it is a mixed use development that is 100,000 square feet or more in gross floor area and along a major highway/ at key intersections identified in the circulation element of the General Plan.
4	Within urban portions of the Valley that are served by rail transit, and within the Town Center in areas served by bus transit, promote development of intense, mixed use environments that offer opportunities for residents to live, work, shop, and recreate without having to use their vehicles, with residential density from a minimum of 11 dwelling units per acre and commercial uses incorporated at a minimum range of 10 percent to 20 percent of the total floor area.	Not Applicable. The project site is not located within an area of the Santa Clarita Valley that is immediately adjacent to rail transit. Moreover, although the project site is located within the City, which is considered an urbanized area, the Wiley Canyon community is intended for this goal. However, the project would include off-site infrastructure improvements to promote pedestrian and multi-modal access. Such improvements include new sidewalks and bus bays along Wiley Canyon Road.
5	Both vertical or horizontal integration of uses should be allowed in mixed use development, with an emphasis on tying the uses together with appropriate pedestrian linkages.	Consistent. See Mixed Use Goal No. 1 above.
6	Adequate open space and amenities should be provided to support both commercial and residential uses, including, without limitation, plazas and landscaped walkways.	Consistent. The project would include designated recreational areas for public use on site. In addition, the project would include open space and amenities for both the senior living facility and multifamily apartments. As described in Chapter 3, Project Description, of this EIR, the following ensure consistency with this goal:
		Within the senior living facility, a memory care garden with a central fountain, table and bench seating, faux turf, and enhanced concrete pavers are proposed. The senior living facility would also include a pool and spa, chaise lounge seating, and outdoor dining areas as well as a barbeque area with a shade structure, counter space, and pedestrian pathways and paving.

Table 4.1-1. Project Consistency with the Community Character and Design Guidelines

No.	Goal	Discussion
ino.		 The multifamily residences would include a community recreation area with a pool and spa, lounge seating, outdoor dining tables, cabana shade structures, and outdoor barbeque counter. See Figure 3-4a through 3-4c, Tentative Map and Figure 3-6, Conceptual Landscape Plan for locations of recreational amenities and undeveloped areas. Pedestrian sidewalks are proposed throughout the senior living facility and multifamily residential components of the project site. Along the western edge of Wiley Canyon Road and the southern portion of the project site would be a multi-use trail providing pedestrian access and maintenance access for the site's facilities.
7	Mixed use projects should be designed to create a pedestrian-scale environment through appropriate street and sidewalk widths, block lengths, relationships of buildings to streets, and use of public spaces.	Consistent. See Mixed Use Goal No. 1 and Mixed Use Goal No. 6 above.
8	New mixed use projects should include a design scheme of visual interest without clutter throughout the development.	Consistent. See Mixed Use Goal No. 3 above.
9	Building scale and architectural massing of new projects should incorporate elements for a reasonable transition to adjacent existing, or future, developments.	Consistent. The project site is predominately vacant with the exception of some existing structures on the northern end, which are proposed to be demolished. Surrounding land uses include a mobile home development, known as the Mulberry Mobile Home Park, north of the site and a commercial area to the south. The project site is bisected partially by Wiley Canyon Road. To the east of the project site are single-family residences. No development is proposed on the eastern portion of the project site. As such, the project would result in the construction of three- to four-story buildings, the scale and massing of which would be reviewed by the City's Planning Commission for approval. See Mixed Use Goal No. 3 above for more information.
10	Where multiple buildings are planned in a mixed use development, the structures should be of varying heights to create visual interest from the street. The ground level facade for a multi-level structure should have a distinct look from the facade of the floor levels above (e.g., using different architectural elements, such as building material or trim accent, lighting, cornice lines, awnings, projections, window treatments and sizes, and/or paint colors).	Consistent. See Overall Goal No. 4 and Mixed Use Goal No. 3 above.

Table 4.1-1. Project Consistency with the Community Character and Design Guidelines

No.	Goal	Discussion
11	The vertical plane of the building facade should be broken up with a high level of articulation (e.g., projecting entry or window features, recessed elements, transparent storefronts, identifiable retail spaces, and awning and entrance canopies), especially at ground level.	Consistent. See Mixed Use Goal No. 3 above.
12	To define the street frontage and pedestrian areas, mixed use and commercial buildings should generally be built to property lines (back of sidewalk) or other publicly accessible areas.	Consistent. See Mixed Use Goal No. 3 above.
13	Where possible, provide clearly marked and separated driveways and parking areas for each proposed use.	Consistent. See Overall Goal No. 8 above.
14	When multiple uses are proposed in the same building, there should be separate and convenient entrances for each use.	Not Applicable. The project does not propose multiple uses within one building.
15	Commercial uses should attempt to shield parking lot and security lighting to avoid impacts on the surrounding residential areas.	Not Applicable. The project's proposed commercial space is associated with the development and operations of the senior living facility.
16	The entire mixed use development should utilize a consistent architectural style and materials. However, if the intent is to differentiate between uses, some architectural details should vary slightly.	Consistent. The project would maintain a cohesive architectural style throughout the site and its development components. See Mixed Use Goal No. 2 above for more discussion.
17	For mixed use projects that are over two stories in height, portions of the upper stories should be recessed from the front facade to reduce the overall massing of the building.	Consistent. See Mixed Use Goal No. 3 above.
18	Mixed use projects should use only a minimal amount of commercial signage and place signs only where most appropriate.	Consistent. The proposed commercial use would comply with signage requirements in the City.

Source: City of Santa Clarita 2009

As shown in Table 4.1-1 and Table 4.10-2 (see Section 4.10, Land Use and Planning), the proposed project would be either partially or completely consistent with the aesthetic components of the City's Design Guidelines and the City's General Plan. Moreover, the existing visual quality of the project site is low given that the site is predominately vacant with abandoned structures located on the northern end. While the project would substantially alter the existing vacant character of the project site, adherence to the aesthetic components of the City's General Plan and the City's Design Guidelines would ensure development compatibility with the City in general. Further, the project includes a variety of building forms, ranging from three- to four-story buildings and would incorporate simple architectural design features to complement existing development in the area. Therefore, impacts would be less than significant, and no mitigation is required.

Threshold AES-4: Would the project create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

The proposed project would result in the redevelopment of existing predominantly vacant land with a new mixeduse development consisting of a senior living facility, multifamily residential apartments, a publicly accessible outdoor recreational field space, and off-site circulation improvements. Given the proposed use on the predominantly vacant site, the project would introduce significant new sources of light and glare when compared to existing conditions. Potential impacts concerning new sources of light and glare are described in greater detail below.

Light

Given that there are limited sources of light on the project site, development of the project site would introduce significant new sources of light. New sources of light would be introduced as a result of the project's interior lighting, exterior mounted fixtures, and outdoor lighting for pedestrian paths, recreational spaces, roadways, and landscaping. The nearest light-sensitive receptor to the project site would be the Mulberry Mobile Home Park to the north and the single-family residences to the east across Wiley Canyon Road. The residences to the east would experience reduced light trespass due to the distance between the light-sensitive receptor and the project site. However, the mobile home park would experience significantly new sources of light trespass, particularly during the nighttime.

Design considerations, such as walls and fences, within the project site would reduce light trespass to the adjacent light-sensitive receptors. The project proposes a six-foot-high wall at the northern boundary of the project site. In addition, the distance between the project site and the mobile home park would further reduce adverse effects related to project lighting features. The project would also be required to comply with all applicable development standards related to light. For example, SCMC Section 17.51.050, Outdoor Lighting Standards, allows for outdoor lighting for nighttime safety, utility, security, productivity, enjoyment, and commerce. Existing regulations such as these are intended to minimize off-site light trespass through design via light shielding and downward directions to ensure light trespass is not visible from a public right-of-way. Further, new developments including the proposed project are required to submit a lighting plan that specifies the location, fixture type, fixture height, and photometric information of all outdoor lighting and information about shut-off timers and hours of operation for outdoor lighting; all of which are subject to approval by the Director of the City's Planning Division.

Given the above, through adherence to applicable law including SCMC section 17.51.050, potential lighting impacts would be **less than significant**. No mitigation is required.

Glare

Glare is typically associated with daytime impacts and is often associated with buildings that are constructed with a significant proportion of reflective materials such as glass and metal. As shown in the proposed building elevations in Figure 3-5, Conceptual Elevations, the proposed project would incorporate glass windows and some metal finishes, which are potentially reflective materials. As such, the proposed project could result in increased glare at the project site. However, daytime glare produced as a result of project implementation is not anticipated to adversely affect nearby sensitive receptors due to the architectural elements incorporated in the project's design. For example, metal elements would likely be painted and this process would typically result in reduced reflectivity. In addition, although some reflective materials (glass and metal) would be used, the proposed project would primarily be constructed of non-reflective, neutral-colored materials such as beige stucco, clay tiles, and other

non-reflective accent details and paving (see Figure 3-5). Additionally, due to the distance and local topography of Wiley Canyon Road and vegetation associated with the South Fork of the Santa Clara River (which serves as a buffer) between proposed project structures and the sensitive viewers such as drivers on Wiley Canyon Road, slight increases in glare introduced by the proposed project would not result in substantial adverse effect. As such, impacts would be **less than significant**. No mitigation is required.

Threshold AES-5: Would the project result in changes to the topography of a Primary or Secondary Ridgeline?

The project site is not located within an identified primary or secondary ridgeline as shown in the City's General Plan (City of Santa Clarita 2011a). As such, the project would not result in changes to the topography of this resources. **No impact** would occur.

4.1.5 Mitigation Measures

Impacts would not be significant. No mitigation is required.

4.1.6 Level of Significance After Mitigation

The proposed project would not result in significant impacts; thus, no mitigation is required.

4.1.7 Cumulative Effects

Impacts related to aesthetics would either not occur or be less than significant with no mitigation required. A significant cumulative impact to aesthetics would occur if the development of the related projects would collectively degrade the visual quality or character of an area, if projects would combine to block important views, or if projects would cumulatively result in a new source of light or glare. The geographic scope for analyzing cumulative impacts related to aesthetics focuses on lands in proximity to the project area and within the surrounding viewshed that would have views of the site from public locations (e.g., public roadways). One project (Trails at Lyons Canyon) from the list of related projects identified in Table 3-4 would have the potential to result in such impacts. However, this related project would be required to comply with applicable land use and zoning regulations governing scenic quality, lighting and glare, and other scenic resources. Although this related project is within the project site's vicinity and shares similar geographic considerations for potential adverse effects, such as the I-5 corridor and the viewshed of ridgelines and foothills surrounding Wiley Canyon, the proposed project itself would not result in significant impacts necessary for a cumulative considerable significant impact to occur. The other related projects would be developed within an urban setting within the Newhall community of the city and would contribute to the overall character and quality of the environment once developed. Further, these projects do not share the same viewsheds as the project site and building materials, bulk, scale, and setbacks for each cumulative project would be required to comply with the General Plan, Municipal Code, and any applicable specific plans as they relate to design standards and scenic quality. Adherence to applicable regulations designed to reduce potential impacts and promote compatibility within the surrounding vicinity would minimize potential impacts to a less than significant level.

Given that all project aesthetic impacts are not significant, the potential for the project to result in cumulative aesthetic impacts is **less than significant**.

4.1.8 References Cited

- Caltrans (California Department of Transportation). 2019. "Scenic Highways." Copyright 2019. Accessed October 2022. https://dot.ca.gov/programs/design/lap-landscape-architecture-and-community-livability/lap-liv-i-scenic-highways.
- U.S. Census Bureau. 2022. "QuickFacts Santa Clarita City, California." Accessed October 2022. https://www.census.gov/quickfacts/fact/table/santaclaritacitycalifornia/PST045217.
- City of Santa Clarita. 2005. Local Guidelines and Procedures for Implementation of the Provisions of the California Environmental Quality Act as Adopted by City Council for the City of Santa Clarita Pursuant to Resolution 05-38 on April 26, 2005.
- City of Santa Clarita. 2009. *Community Character and Design Guidelines*. Adopted March 24, 2009. Accessed October 2022. https://www.santa-clarita.com/city-hall/departments/community-development/planning/community-character-and-design-guidelines.
- City of Santa Clarita. 2011a. City of Santa Clarita General Plan, Conservation and Open Space Element. Adopted June 2011. Accessed October 2022. https://www.codepublishing.com/CA/SantaClarita/html/SantaClaritaGP/6%20-%20Conservation%20and%20Open%20Space%20Element.pdf.
- City of Santa Clarita. 2011b. City of Santa Clarita General Plan, Land Use Element. Adopted June 2011. Accessed October 2022. https://www.codepublishing.com/CA/SantaClarita/html/SantaClaritaGP/2%20-%20Land%20Use%20Element.pdf.

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4.2 Air Quality

This section describes potential impacts of the proposed Wiley Canyon Mixed-Use Project (project) on air quality and its contribution to regional air quality conditions, identifies associated regulatory requirements, evaluates potential impacts, and identifies mitigation measures related to implementation of the project. The analysis in this section is based on the Air Quality Technical Report included as Appendix B to this EIR.

4.2.1 Environmental Setting

The project site is regionally located in the northern foothills of the Santa Susana Mountains, at the westerly perimeter of the Santa Clarita Valley. Locally, the project site is immediately east of Interstate 5 (I-5), north of Calgrove Boulevard, and south of Hawkbryn Avenue. The project site consists of two parcels that are currently vacant. A portion of the South Fork of the Santa Clara River runs along the eastern boundary of the property with the north end of the drainage being channelized. The City of Santa Clarita General Plan Land Use Designation of Mixed-Use Neighborhood (MX-N) encompasses the entire property and is included as the Calgrove Corridor/Smiser Ranch Special Development Area and has a zoning designation of Mixed-Use Neighborhood (MXN).

The project site is a total of approximately 32 acres of which 18 acres would be impacted by the proposed mixed-use development footprint, and the remaining approximately 15 acres would be retained for open space, recreation, and drainage purposes. The project would consist of a 217-unit Senior Living Facility, and up to 379 multi-family residential units, and commercial uses. The area surrounding the project site includes a small commercial area to the south, residential uses on the north and east, and Interstate 5 (I-5) on the west.

The project site is located within the South Coast Air Basin (SCAB). The SCAB is characterized as having a Mediterranean climate (typified as semiarid with mild winters, warm summers, and moderate rainfall). The SCAB is a 6,745-square-mile area bounded by the Pacific Ocean to the west and the San Gabriel, San Bernardino, and San Jacinto Mountains to the north and east. The SCAB includes all of Orange County and the non-desert portions of Los Angeles, Riverside, and San Bernardino counties.

Climate and Meteorology

The SCAB generally lies in the semi-permanent, high-pressure zone of the eastern Pacific. As a result, the climate is mild and tempered by cool sea breezes. The usually mild climatological pattern is interrupted infrequently by periods of extremely hot weather, winter storms, or Santa Ana winds. The extent and severity of the air pollution problem in the SCAB is a function of the area's natural physical characteristics (e.g., weather and topography) as well as of human-made influences (e.g., development patterns and lifestyle). Factors such as wind, sunlight, temperature, humidity, rainfall, and topography all affect the accumulation and/or dispersion of pollutants throughout the SCAB.

Climate

Moderate temperatures, comfortable humidity, and limited precipitation characterize the climate in the SCAB. The average annual temperature varies little throughout the basin, averaging 75°F. However, with a less pronounced oceanic influence, the eastern inland portions of the basin show greater variability in annual minimum and maximum temperatures. All portions of the SCAB have recorded temperatures over 100°F in recent years. Although the SCAB has a semiarid climate, the air near the surface is moist because of the presence of a shallow marine

layer. Except for infrequent periods when dry air is brought into the basin by offshore winds, the ocean effect is dominant. Periods with heavy fog are frequent, and low stratus clouds, occasionally referred to as "high fog," are a characteristic climate feature. Annual average relative humidity is 70% at the coast and 57% in the eastern part of the basin. Precipitation in the SCAB is typically 9 to 14 inches annually and is rarely in the form of snow or hail, due to typically warm weather. The frequency and amount of rainfall is greater in the coastal areas of the basin. The City of Santa Clarita (City) is characterized by relatively low rainfall, with warm summers and mild winters. Average temperatures range from a high of 94°F in August to a low of 36°F in January (WRCC 2024).

Sunlight

The presence and intensity of sunlight are necessary prerequisites for the formation of photochemical smog. Under the influence of the ultraviolet radiation of sunlight, certain "primary" pollutants (mainly reactive hydrocarbons and oxides of nitrogen [NOx]) react to form "secondary" pollutants (primarily oxidants). Since this process is time dependent, secondary pollutants can be formed many miles downwind of the emission sources. Due to the prevailing daytime winds and time-delayed nature of photochemical smog, oxidant concentrations are highest in the inland areas of Southern California.

Temperature Inversions

Under ideal meteorological conditions and irrespective of topography, pollutants emitted into the air mix and disperse into the upper atmosphere. However, the Southern California region frequently experiences temperature inversions in which pollutants are trapped and accumulate close to the ground. The inversion, a layer of warm, dry air overlaying cool, moist marine air, is a normal condition in coastal Southern California. The cool, damp, and hazy sea air capped by coastal clouds is heavier than the warm, clear air, which acts as a lid through which the cooler marine layer cannot rise. The height of the inversion is important in determining pollutant concentration. When the inversion is approximately 2,500 feet above mean sea level (amsl), the sea breezes carry the pollutants inland to escape over the mountain slopes or through the passes. At a height of 1,200 feet above mean sea level, the terrain prevents the pollutants from entering the upper atmosphere, resulting in the pollutants settling in the foothill communities. Below 1,200 feet above mean sea level, the inversion puts a tight lid on pollutants, concentrating them in a shallow layer over the entire coastal basin. Usually, inversions are lower before sunrise than during the daylight hours. Mixing heights for inversions are lower in the summer and inversions are more persistent, being partly responsible for the high levels of ozone (O₃) observed during summer months in the SCAB. Smog in Southern California is generally the result of these temperature inversions combining with coastal day winds and local mountains to contain the pollutants for long periods, allowing them to form secondary pollutants by reacting in the presence of sunlight. The basin has a limited ability to disperse these pollutants due to typically low wind speeds and the surrounding mountain ranges.

4.2.1.1 Air Quality Characteristics

Existing Ambient Air Quality

The South Coast Air Quality Management District (SCAQMD) maintains a network of air quality monitoring stations located throughout the Air Basin to measure ambient pollutant concentrations. The monitoring station most representative of the project site is the Santa Clarita Valley Monitoring Station, located at 22224 Placerita Canyon Road, Santa Clarita, CA 91321. Criteria pollutants monitored at this station include ozone, NO₂, CO, and PM₁₀. Additional monitoring stations were used to complete Table 4.2-1, Ambient Air Quality in the Project Vicinity. The West San Fernando Valley Monitoring Station was referenced for PM_{2.5} data, located at 18330 Gault St, Reseda, CA 91702, and the Central Los Angeles County Monitoring Station, located at 1630 North Main Street, Los Angeles,

CA 90012, was referenced for Pb and SO_2 data. The most recent data available from the SCAQMD for this monitoring station are from years 2018 to 2020 (SCAQMD 2021a). As shown in Table 4.2-1, the California Ambient Air Quality Standards (CAAQS) and National Ambient Air Quality Standards (NAAQS) were not exceeded in the project site vicinity for most pollutants between 2018 and 2020, with the exception of O_3 and PM_{10} .

Table 4.2-1. Ambient Air Quality in the Project Vicinity

Pollutant/Standard ^a	2018	2019	2020
Ozone, O ₃ (1-hour)	0.132	0.128	0.148
Maximum Concentration (ppm)	21	34	44
Days > CAAQS (0.09 ppm)			
Ozone, O ₃ (8-hour)	0.106	0.106	0.122
Maximum Concentration (ppm)	0.097	0.101	0.106
4th High 8-hour Concentration (ppm)	52	56	73
Days > CAAQS (0.070 ppm)	52	56	73
Days > NAAQS (0.070 ppm)			
Nitrogen Dioxide, NO ₂ (1-hour)	58.9.	46.3	46.3
Maximum Concentration (ppm)	0	0	0
Days > CAAQS (0.18 ppm)	37.9	35.3	35.9
98th Percentile Concentration (ppm)	0	0	0
Days > NAAQS (0.100 ppm)			
Nitrogen Dioxide, NO ₂ (Annual)	10.9	9.1	9.4
Annual Arithmetic Mean (0.030 ppm)			
Carbon Monoxide, CO (1-hour)	1.0	1.5	1.2
Maximum Concentration (ppm)	0	0	0
Days > CAAQS (20 ppm)	0	0	0
Days > NAAQS (35 ppm)			
Carbon Monoxide, CO (8-hour)	0.8	1.2	0.8
Maximum Concentration (ppm)	0	0	0
Days > CAAQS (9.0 ppm)	0	0	0
Days > NAAQS (9 ppm)			
Sulfur Dioxide, SO ₂ (1-hour)	17.9	10.0	3.8
Maximum Concentration (ppm)	0	0	0
Days > CAAQS (0.25 ppm)	2.8	2.3	3.3
99th Percentile Concentration (ppm)	0	0	0
Days > NAAQS (0.075 ppm)			

Table 4.2-1. Ambient Air Quality in the Project Vicinity

Pollutant/Standard ^a	2018	2019	2020
Respirable Particulate Matter, PM10 (24-hour)	49	62	48
Maximum Concentration (µg/m³)	0	1	0
Samples > CAAQS (50 μg/m³)	0	0	0
Samples > NAAQS (150 μ g/m ³)			
Respirable Particulate Matter, PM10 (Annual)	23.4	18.4	22.5
Annual Arithmetic Mean (20 µg/m³)			
Fine Particulate Matter, PM2.5 (24-hour)	31.0	30.00	27.60
Maximum Concentration (µg/m³)	22.60	26.30	26.40
98th Percentile Concentration (µg/m³)	0	0	0
Samples > NAAQS (35 µg/m³)			
Fine Particulate Matter, PM2.5 (Annual)	10.32	9.16	10.13
Annual Arithmetic Mean (12 µg/m³)			
Lead	0.011	0.012	0.013
Maximum 30-day average (μg/m³)	0	0	0
Samples > CAAQS (1.5 μ g/m ³)	0.011	0.010	0.011
Maximum 3-month rolling average (μg/m³)	0	0	0
Days > NAAQS (0.15 μg/m³)			

Source: SCAQMD, Historical Data by Year, (2018-2020), http://www.aqmd.gov/home/air-quality/air-quality-data-studies/historical-data-by-year. Accessed December 6, 2021.

Notes:

The SCAQMD is the regional agency responsible for the regulation and enforcement of federal, state, and local air pollution control regulations in the SCAB, where the project is located. The entire SCAB is designated as a nonattainment area for federal and state O₃ standards. The U.S. Environmental Protection Agency (USEPA) has classified the SCAB as an extreme nonattainment area and has mandated that it achieve attainment no later than June 15, 2024. The SCAB is designated as an attainment area for state and federal CO standards. The SCAB is designated as an attainment area under the state and federal standards for nitrogen dioxide (NO₂). The entire SCAB is in attainment with both federal and state sulfur dioxide (SO₂) standards. Only the Los Angeles County portion of the SCAB has been designated as nonattainment for the federal rolling 3-month average lead standard, and the SCAB is designated attainment for the state lead standard. The SCAB is designated as a nonattainment area for state standards for particulate matter with an aerodynamic diameter equal to or less than 10 microns (PM₁₀); however, it is designated as an attainment area for federal standards. In regard to particulate matter with an aerodynamic diameter equal to or less than 2.5 microns (PM_{2.5}) attainment status, the SCAB is designated as a nonattainment area by the California Air Resources Board (CARB) and USEPA. The attainment classifications for these criteria pollutants are outlined in Table 4.2-2.

a ppm = parts per million; μg/m3 = micrograms per cubic meter

Table 4.2-2. South Coast Air Basin Attainment Classification

Pollutant	Averaging Time	Designation/Classification			
Federal Standards					
O ₃ 8 hours		Nonattainment (extreme)			
NO ₂	1 hour	Unclassifiable/attainment			
	Annual arithmetic mean	Attainment (maintenance)			
CO	1 hour; 8 hours	Attainment (maintenance)			
SO ₂	24 hours; annual arithmetic mean	Unclassifiable/attainment			
PM ₁₀	24 hours	Attainment (maintenance)			
PM _{2.5}	24 hours; annual arithmetic mean	Nonattainment (serious)			
Lead	Quarter	Unclassifiable/attainment			
	3-month average	Nonattainment (partial) ^a			
State Standards					
Оз	1 hour; 8 hours	Nonattainment			
NO ₂	1 hour; annual arithmetic mean	Attainment			
CO	1 hour; 8 hours	Attainment			
SO ₂	1 hour; 24 hours	Attainment			
PM ₁₀	24 hours; annual arithmetic mean	Nonattainment			
PM _{2.5}	Annual arithmetic mean	Nonattainment			
Leadb	30-day average	Attainment			
Sulfates (SO ₄)	24 hours	Attainment			
Hydrogen sulfide (H ₂ S)	1 hour	Unclassified			
Vinyl chloride ^b	24 hours	No designation			
Visibility-reducing particles	8 hours (10:00 a.m6:00 p.m.)	Unclassified			

Source: USEPA 2016 (federal); CARB 2016a (state).

Notes: $O_3 = ozone$; $NO_2 = nitrogen$ dioxide; CO = carbon monoxide; $SO_2 = sulfur$ dioxide; $PM_{10} = particulate$ matter with an aerodynamic diameter equal to or less than 10 microns; $PM_{2.5} = particulate$ matter with an aerodynamic diameter equal to or less than 2.5 microns.

Existing Area Health Risk

The SCAQMD has prepared a series of maps that show regional trends in estimated outdoor inhalation cancer risk from toxic emissions, as part of an ongoing effort to provide insight into relative risks. The maps represent the estimated number of potential cancers per million people associated with a lifetime of breathing air toxics (24 hours per day outdoors for 70 years). The background potential cancer risk per million people in the project area using the updated Office of Environmental Health Hazard Assessment (OEHHA) methodology is estimated at 306 in one million (compared to an overall Basin Average Air Toxics Cancer Risk in MATES V of 455 in a million) (SCAQMD 2021b). Generally, the risk from air toxics is lower near the coastline and increases inland, with higher risks concentrated near large diesel sources (e.g., freeways, airports, and ports).

^a Partial Nonattainment designation – Los Angeles County portion of Basin only for near-source monitors. Expected to remain in attainment based on current monitoring data.

California Air Resources Board (CARB) has identified lead and vinyl chloride as toxic air contaminants (TACs) with no threshold level of exposure for adverse health effects determined.

Existing Site Emissions

The project site is currently partially developed with two buildings, a mobile home, and a storage shed. However, the project site is not currently occupied. For the purposes of this analysis, no existing operational air quality emissions are assumed from the existing site because it is currently vacant. Therefore, existing operational air quality emissions are not required to be calculated and the project's air quality emissions would be considered net new.

Sensitive Receptors and Locations

Certain population groups, such as children, the elderly, and acutely and chronically ill persons (especially those with cardio-respiratory diseases) are considered more sensitive to the potential effects of air pollution than others. As a result, certain land uses that are occupied by these population groups, such as residences, hospitals, and schools are considered to be air quality-sensitive land uses. The area surrounding the project site includes the Mulberry Mobile Home Park located approximately 25 meters (82 feet) to the north, residential uses approximately 65 meters (213 feet) to the east and limited commercial uses on Wiley Canyon Road and Calgrove Boulevard approximately 295 meters (968 feet) to the south. Additionally, I-5 lies adjacent to the project site. All other air quality-sensitive uses are located at greater distances from the project site than the residences at the Mulberry Mobile Home Park located to the north, and as such, would experience lower air pollutant impacts from potential sources of pollutants from the project site due to atmospheric dispersion effects.

4.2.1.2 Pollutants and Effects

Criteria Air Pollutants

Certain air pollutants have been recognized to cause notable health problems and consequential damage to the environment either directly or in reaction with other pollutants due to their presence in elevated concentrations in the atmosphere. Such pollutants have been identified and regulated as part of the overall endeavor to prevent further deterioration and facilitate improvement in air quality. The following pollutants are regulated by the USEPA and are subject to emissions control requirements adopted by federal, state and local regulatory agencies. These pollutants are referred to as "criteria air pollutants" as a result of the specific standards, or criteria, which have been adopted for them. A description of the health effects of these criteria air pollutants are provided below.

Ozone (O₃). Ozone is a secondary pollutant formed by the chemical reaction of volatile organic compounds (VOCs) and nitrogen oxides (NO_x) in the presence of sunlight under favorable meteorological conditions, such as high temperature and stagnation episodes. Ozone concentrations are generally highest during the summer months when direct sunlight, light wind, and warm temperature conditions are favorable. According to the USEPA, ozone can cause the muscles in the airways to constrict potentially leading to wheezing and shortness of breath (USEPA 2021a). Ozone can make it more difficult to breathe deeply and vigorously; cause shortness of breath and pain when taking a deep breath; cause coughing and sore or scratchy throat; inflame and damage the airways; aggravate lung diseases, such as asthma, emphysema, and chronic bronchitis; increase the frequency of asthma attacks; make the lungs more susceptible to infection; continue to damage the lungs even when the symptoms have disappeared; and cause chronic obstructive pulmonary disease. Long-term exposure to ozone is linked to aggravation of asthma, and is likely to be one of many causes of asthma development and long-term exposures to higher concentrations of ozone may also be linked to permanent lung damage, such as abnormal lung development in children. According to the California Air Resources Board (CARB), inhalation of ozone causes inflammation and irritation of the tissues lining human airways, causing and worsening a variety of symptoms and exposure to ozone

can reduce the volume of air that the lungs breathe in and cause shortness of breath (CARB 2021a). The USEPA states that people most at risk from breathing air containing ozone include people with asthma, children, older adults, and people, who are active outdoors, especially outdoor workers (USEPA 2021a). Children are at greatest risk from exposure to ozone because their lungs are still developing, and they are more likely to be active outdoors when ozone levels are high, which increases their exposure (USEPA 2021a). According to CARB, studies show that children are no more or less likely to suffer harmful effects than adults; however, children and teens may be more susceptible to ozone and other pollutants because they spend nearly twice as much time outdoors and engaged in vigorous activities compared to adults. Children breathe more rapidly than adults and inhale more pollution per pound of their body weight than adults and are less likely than adults to notice their own symptoms and avoid harmful exposures. Further research may be able to better distinguish between health effects in children and adults.

Nitrogen Dioxide (NO₂) and Nitrogen Oxides (NO_X): NO_X is a term that refers to a group of compounds containing nitrogen and oxygen. The primary compounds of air quality concern include NO2 and nitric oxide (NO). Ambient air quality standards have been promulgated for NO₂, which is a reddish-brown, reactive gas. The principal form of NO_x produced by combustion is NO, but NO reacts quickly in the atmosphere to form NO₂, creating the mixture of NO and NO₂ referred to as NO_X (CARB 2021b). Major sources of NO_X include emissions from cars, trucks and buses, power plants, and off-road equipment (USEPA 2021b). The terms NO_X and NO₂ are sometimes used interchangeably. However, the term NO_x is typically used when discussing emissions, usually from combustion-related activities, and the term NO₂ is typically used when discussing ambient air quality standards. Where NO_x emissions are discussed in the context of the thresholds of significance or impact analyses, the discussions are based on the conservative assumption that all NO_x emissions would oxidize in the atmosphere to form NO₂. According to the USEPA, short-term exposures to NO₂ can potentially aggravate respiratory diseases, particularly asthma, leading to respiratory symptoms (such as coughing, wheezing or difficulty breathing), hospital admissions and visits to emergency rooms, while longer exposures to elevated concentrations of NO₂ may contribute to the development of asthma and potentially increase susceptibility to respiratory infections (USEPA 2021b). According to CARB, controlled human exposure studies show that NO₂ exposure can intensify responses to allergens in allergic asthmatics (CARB 2021b). In addition, a number of epidemiological studies have demonstrated associations between NO2 exposure and premature death, cardiopulmonary effects, decreased lung function growth in children, respiratory symptoms, emergency room visits for asthma, and intensified allergic responses. Infants and children are particularly at risk from exposure to NO₂ because they have disproportionately higher exposure to NO₂ than adults due to their greater breathing rate for their body weight and their typically greater outdoor exposure duration, while in adults, the greatest risk is to people who have chronic respiratory diseases, such as asthma and chronic obstructive pulmonary disease. CARB states that much of the information on distribution in air, human exposure and dose, and health effects is specifically for NO₂ and there is only limited information for NO and NO_x, as well as large uncertainty in relating health effects to NO or NO_X exposure (CARB 2021b).

Carbon Monoxide (CO). CO is primarily emitted from combustion processes and motor vehicles due to the incomplete combustion of fuel, such as natural gas, gasoline, or wood, with the majority of outdoor CO emissions from mobile sources (CARB 2021c). According to the USEPA, breathing air with a high concentration of CO reduces the amount of oxygen that can be transported in the blood stream to critical organs like the heart and brain and at very high levels, which are possible indoors or in other enclosed environments, CO can cause dizziness, confusion, unconsciousness and death (USEPA 2021c). Very high levels of CO are not likely to occur outdoors; however, when CO levels are elevated outdoors, they can be of particular concern for people with some types of heart disease since these people already have a reduced ability for getting oxygenated blood to their hearts and are especially vulnerable to the effects of CO when exercising or under increased stress (USEPA 2021c). In these situations, short-term exposure to elevated CO may result in reduced oxygen to the heart accompanied by chest pain also known as

angina (USEPA 2021c). According to CARB, the most common effects of CO exposure are fatigue, headaches, confusion, and dizziness due to inadequate oxygen delivery to the brain. For people with cardiovascular disease, short-term CO exposure can further reduce their body's already compromised ability to respond to the increased oxygen demands of exercise, exertion, or stress; inadequate oxygen delivery to the heart muscle leads to chest pain and decreased exercise tolerance. Unborn babies, infants, elderly people, and people with anemia or with a history of heart or respiratory disease are most likely to experience health effects with exposure to elevated levels of CO (CARB 2021c).

Sulfur Dioxide (SO2). According to the USEPA, the largest source of SO₂ emissions in the atmosphere is the burning of fossil fuels by power plants and other industrial facilities, while smaller sources of SO₂ emissions include industrial processes, such as extracting metal from ore; natural sources, such as volcanoes; and locomotives, ships and other vehicles and heavy equipment that burn fuel with a high sulfur content (USEPA 2021d). In 2006, California phased-in the ultra-low-sulfur diesel regulation limiting vehicle diesel fuel to a sulfur content not exceeding 15 parts per million, down from the previous requirement of 500 parts per million, substantially reducing emissions of sulfur from diesel combustion (CARB 2021d). According to the USEPA, short-term exposures to SO₂ can harm the human respiratory system and make breathing difficult (USEPA 2021d). According to CARB, health effects at levels near the California one-hour standard are those of asthma exacerbation, including bronchoconstriction accompanied by symptoms of respiratory irritation, such as wheezing, shortness of breath and chest tightness, especially during exercise or physical activity, and exposure at elevated levels of SO₂ (above one part per million (ppm)) results in increased incidence of pulmonary symptoms and disease, decreased pulmonary function, and increased risk of mortality (CARB 2021e). Children, the elderly, and those with asthma, cardiovascular disease, or chronic lung disease (such as bronchitis or emphysema) are most likely to experience the adverse effects of SO₂ (USEPA 2021d, CARB 2021e).

Particulate Matter (PM10 and PM2.5). Particulate matter air pollution is a mixture of solid particles and liquid droplets found in the air (USEPA 2021e). Some particles, such as dust, dirt, soot, or smoke, are large or dark enough to be seen with the naked eye, while other particles are so small they can only be detected using an electron microscope. Particles are defined by their diameter for air quality regulatory purposes: inhalable particles with diameters that are generally ten micrometers (µm) and smaller (PM10); and fine inhalable particles with diameters that are generally 2.5 µm and smaller (PM_{2.5}) (USEPA 2021e). Thus, PM_{2.5} comprises a portion or a subset of PM₁₀. Sources of PM₁₀ emissions include dust from construction sites, landfills and agriculture, wildfires and brush/waste burning, industrial sources, and wind-blown dust from open lands (CARB 2021f). Sources of PM2.5 emissions include combustion of gasoline, oil, diesel fuel, or wood. PM₁₀ and PM_{2.5} may be either directly emitted from sources (primary particles) or formed in the atmosphere through chemical reactions of gases (secondary particles), such as SO₂, NO_x, and certain organic compounds. According to CARB, both PM₁₀ and PM_{2.5} can be inhaled, with some depositing throughout the airways; PM₁₀ is more likely to deposit on the surfaces of the larger airways of the upper region of the lung, while PM_{2.5} is more likely to travel into and deposit on the surface of the deeper parts of the lung. which can induce tissue damage, and lung inflammation. Short-term (up to 24 hours duration) exposure to PM₁₀ has been associated primarily with worsening of respiratory diseases, including asthma and chronic obstructive pulmonary disease, leading to hospitalization and emergency department visits (CARB 2021f). The effects of longterm (months or years) exposure to PM₁₀ are less clear, although studies suggest a link between long-term PM₁₀ exposure and respiratory mortality. The International Agency for Research on Cancer published a review in 2015 that concluded that particulate matter in outdoor air pollution causes lung cancer. Short-term exposure to PM_{2.5} has been associated with premature mortality, increased hospital admissions for heart or lung causes, acute and chronic bronchitis, asthma attacks, emergency room visits, respiratory symptoms, and restricted activity days and long-term exposure to PM_{2.5} has been linked to premature death, particularly in people who have chronic heart or lung diseases, and reduced lung function growth in children. According to CARB, populations most likely to experience adverse health effects with exposure to PM_{10} and $PM_{2.5}$ include older adults with chronic heart or lung disease, children, and asthmatics and children and infants are more susceptible to harm from inhaling pollutants such as PM_{10} and $PM_{2.5}$ compared to healthy adults because they inhale more air per pound of body weight than do adults, spend more time outdoors, and have developing immune systems (CARB 2021f).

Lead. Major sources of lead emissions include ore and metals processing, piston-engine aircraft operating on leaded aviation fuel, waste incinerators, utilities, and lead-acid battery manufacturers (USEPA 2021f). In the past, leaded gasoline was a major source of lead emissions; however, the removal of lead from gasoline has resulted in a decrease of lead in the air by 98 percent between 1980 and 2014. Lead can adversely affect the nervous system, kidney function, immune system, reproductive and developmental systems and the cardiovascular system, and affects the oxygen carrying capacity of blood (USEPA 2021f). The lead effects most commonly encountered in current populations are neurological effects in children, such as behavioral problems and reduced intelligence, anemia, and liver or kidney damage (CARB 2021g). Excessive lead exposure in adults can cause reproductive problems in men and women, high blood pressure, kidney disease, digestive problems, nerve disorders, memory and concentration problems, and muscle and joint pain (CARB 2021g).

Sulfates. Sulfates in the environment occur as a result of SO_2 (sulfur dioxide) being converted to SO_4^{2-} compounds in the atmosphere where sulfur is first oxidized to SO_2 during the combustion process of sulfur containing, petroleum-derived fuels (e.g., gasoline and diesel fuel) (CARB 2021h). Exposure to SO_4^{2-} , which are part of $PM_{2.5}$, results in health effects similar to those from exposure to $PM_{2.5}$ including reduced lung function, aggravated asthmatic symptoms, and increased risk of emergency department visits, hospitalizations, and death in people who have chronic heart or lung diseases (CARB 2021h). Population groups with higher risks of experiencing adverse health effects with exposure to SO_4^{2-} include children, asthmatics, and older adults who have chronic heart or lung diseases (CARB 2021h).

Vinyl Chloride. Vinyl chloride is a colorless gas with a mild, sweet odor, which has been detected near landfills, sewage plants, and hazardous waste sites, due to the microbial breakdown of chlorinated solvents. Short-term exposure to high levels of vinyl chloride in air can cause nervous system effects, such as dizziness, drowsiness, and headaches. Long-term exposure through inhalation can cause liver damage, including liver cancer.

Hydrogen Sulfide. Hydrogen sulfide is a colorless and flammable gas that has a characteristic odor of rotten eggs. Sources of hydrogen sulfide include geothermal power plants, petroleum refineries, sewers, and sewage treatment plants. Exposure to hydrogen sulfide can result in nuisance odors, as well as headaches and breathing difficulties at higher concentrations.

Visibility-Reducing Particles. Visibility-reducing particles come from a variety of natural and manmade sources and can vary greatly in shape, size and chemical composition. Visibility reduction is caused by the absorption and scattering of light by the particles in the atmosphere before it reaches the observer. Certain visibility-reducing particles are directly emitted to the air, such as windblown dust and soot, while others are formed in the atmosphere through chemical transformations of gaseous pollutants (e.g., sulfates, nitrates, organic carbon particles), which are the major constituents of particulate matter. As the number of visibility reducing particles increases, more light is absorbed and scattered, resulting in less clarity, color, and visual range (CARB 2021i). Exposure to some haze-causing pollutants have been linked to adverse health impacts similar to PM₁₀ and PM_{2.5} as discussed above (CARB 2021i).

Non-Criteria Pollutants

Toxic Air Contaminants (TACs). Toxic Air Contaminants (TACs), or hazardous air pollutants (HAPs) as defined by the USEPA, are defined as those contaminants that are known or suspected to cause serious health problems, but do not have a corresponding ambient air quality standard (USEPA 2021g). For consistency within this document they will be referred to as TACs. TACs are also defined as an air pollutant that may increase a person's risk of developing cancer and/or other serious health effects. TACs are emitted by a variety of industrial processes such as petroleum refining, electric utility and chrome plating operations, commercial operations such as gasoline stations and dry cleaners, and motor vehicle exhaust. TACs may exist as PM₁₀ and PM_{2.5} or as vapors (gases) (USEPA 2021g). TACs include metals, other particles, gases absorbed by particles, and certain vapors from fuels and other sources. The emission of a TAC does not automatically create a health hazard. Other factors, such as the amount of the TAC, its toxicity, how it is released into the air, the weather, and the terrain, all influence whether the emission could be hazardous to human health. Emissions of TACs into the air can be damaging to human health and to the environment. Human exposure to TACs at sufficient concentrations and durations can result in cancer, poisoning, and rapid onset of sickness, such as nausea or difficulty in breathing. Other less measurable effects include immunological, neurological, reproductive, developmental, and respiratory problems. TACs deposited onto soil or into lakes and streams affect ecological systems and eventually human health through consumption of contaminated food. The carcinogenic potential of TACs is a particular public health concern because many scientists currently believe that there is no "safe" level of exposure to carcinogens. Any exposure to a carcinogen poses some risk of contracting cancer (USEPA 2021g).

The public's exposure to TACs is a significant public health issue in California. The Air Toxics "Hotspots" Information and Assessment Act is a State law requiring facilities to report emissions of TACs to air districts (CARB 2021k). The program is designated to quantify the amounts of potentially HAPs released, the location of the release, the concentrations to which the public is exposed, and the resulting health risks. The State Air Toxics Program (AB 2588) identified over 200 TACs, including the 188 TACs identified in the Clean Air Act (CAA) (CARB 2021k).

The USEPA has assessed this expansive list and identified 21 TACs as Mobile Source Air Toxics (MSATs) (USEPA 2004). MSATs are compounds emitted from highway vehicles and non-road equipment. Some toxic compounds are present in fuel and are emitted to the air when the fuel evaporates or passes through the engine unburned. Other toxics are emitted from the incomplete combustion of fuels or as secondary combustion products. Metal air toxics also result from engine wear or from impurities in oil or gasoline. USEPA also extracted a subset of these 21 MSAT compounds that it now labels as the nine priority MSATs: 1,3-butaidene, acetaldehyde, acrolein, benzene, diesel particulate matter (DPM)/diesel exhaust organic gases, ethylbenzene, naphthalene, and polycyclic organic matter. While these nine MSATs are considered the priority transportation toxics, USEPA stresses that the lists are subject to change and may be adjusted in future rules (USDOT 2018).

Diesel Particulate Matter. According to the California Almanac of Emissions and Air Quality, the majority of the estimated health risks from TACs can be attributed to relatively few compounds, the most important being particulate matter from the exhaust of diesel-fueled engines, i.e., DPM (CARB 2021). DPM differs from other TACs in that it is not a single substance, but rather a complex mixture of hundreds of substances.

Diesel exhaust is composed of two phases, gas and particle, and both phases contribute to the health risk. The gas phase is composed of many of the urban HAPs, such as acetaldehyde, acrolein, benzene, 1,3-butadiene, formaldehyde and polycyclic aromatic hydrocarbons. The particle phase is also composed of many different types of particles by size or composition. Fine and ultra-fine diesel particulates are of the greatest health concern and

may be composed of elemental carbon with adsorbed compounds such as organic compounds, sulfate, nitrate, metals and other trace elements. Diesel exhaust is emitted from a broad range of diesel engines; the on-road diesel engines of trucks, buses and cars and the off-road diesel engines that include locomotives, marine vessels and heavy-duty equipment. Although DPM is emitted by diesel-fueled internal combustion engines, the composition of the emissions varies depending on engine type, operating conditions, fuel composition, lubricating oil, and whether an emission control system is present.

The most common exposure to DPM is breathing air that contains diesel exhaust. The fine and ultra-fine particles are respirable (similar to PM_{2.5}), which means that they can avoid many of the human respiratory system defense mechanisms and enter deeply into the lung. Exposure to DPM comes from both on-road and off-road engine exhaust that is either directly emitted from the engines or lingering in the atmosphere.

Diesel exhaust causes health effects from long-term chronic exposures. The type and severity of health effects depends upon several factors including the amount of chemical exposure and the duration of exposure. Individuals also react differently to different levels of exposure. There is limited information on exposure to only DPM, but there is enough evidence to indicate that inhalation exposure to diesel exhaust causes chronic health effects as well as having cancer-causing potential.

Because DPM is typically less than 2.5 microns in size, it also contributes to the same non-cancer health effects as PM_{2.5} exposure. These effects include premature death, hospitalizations and emergency department visits for exacerbated chronic heart and lung disease, including asthma, increased respiratory symptoms, and decreased lung function in children. Several studies suggest that exposure to DPM may also facilitate development of new allergies. Those most vulnerable to non-cancer health effects are children whose lungs are still developing and the elderly who often have chronic health problems (CARB 2021m).

Gasoline Exhaust. Similar to diesel exhaust, gasoline is composed of two phases, gas and particle, and both phases contribute to the health risk. The gas phase is composed of the same HAPs, such as acetaldehyde, acrolein, benzene, 1,3-butadiene, formaldehyde and polycyclic aromatic hydrocarbons. The particle phase is also composed of many different types of particles by size or composition. Fine and ultra-fine diesel particulates are of the greatest health concern and may be composed of elemental carbon with adsorbed compounds such as organic compounds, sulfate, nitrate, metals and other trace elements. Gasoline exhaust is primarily emitted from light-duty passenger vehicles. The compounds in the gas and particles phases can cause health effects from short- and long-term exposures.

4.2.2 Regulatory Framework

Regulatory oversight for air quality in the SCAB is maintained by USEPA at the federal level, CARB at the state level, and by SCAQMD at the local level. Applicable laws, regulations, and standards of these three agencies are described in the following subsections.

Federal

The Federal Clean Air Act was enacted in 1955 and has been amended numerous times in subsequent years, with the most recent amendments occurring in 1990.¹ The CAA is the comprehensive federal law that regulates air emissions in order to protect public health and welfare (USEPA. 2021h). The USEPA is responsible for the

⁴² United States Code Section 7401 et seq.

implementation and enforcement of the CAA, which establishes federal NAAQS, specifies future dates for achieving compliance, and requires USEPA to designate areas as attainment, nonattainment, or maintenance. The CAA also mandates that each state submit and implement a state Implementation Plan (SIP) for each criteria pollutant for which the State has not achieved the applicable NAAQS. The SIP includes pollution control measures that demonstrate how the standards for those pollutants will be met. The sections of the CAA most applicable to the Project include Title I (Nonattainment Provisions) and Title II (Mobile Source Provisions) (USEPA 2017).

Title I requirements are implemented for the purpose of attaining NAAQS for criteria air pollutants. The NAAQS were amended in July 1997 to include an 8-hour standard for ozone and to adopt a NAAQS for PM_{2.5}. The NAAQS were also amended in September 2006 to include an established methodology for calculating PM_{2.5}, as well to revoke the annual PM₁₀ threshold. Table 4.2-3, Ambient Air Quality Standards, shows the NAAQS currently in effect for each criteria pollutant. The NAAQS and the CAAQS for the California criteria air pollutants (discussed below) have been set at levels considered safe to protect public health, including the health of sensitive populations such as asthmatics, children, and the elderly with a margin of safety; and to protect public welfare, including against decreased visibility and damage to animals, crops, vegetation, and buildings (USEPA 2021i).

In addition to criteria pollutants, Title I also includes air toxics provisions which require USEPA to develop and enforce regulations to protect the public from exposure to airborne contaminants that are known to be hazardous to human health. In accordance with Section 112, USEPA establishes National Emission Standards for Hazardous Air Pollutants (NESHAPs). The list of HAPs, or air toxics, includes specific compounds that are known or suspected to cause cancer or other serious health effects.

Title II requirements pertain to mobile sources, such as cars, trucks, buses, and planes. Reformulated gasoline, automobile pollution control devices, and vapor recovery nozzles on gas pumps are a few of the mechanisms the USEPA uses to regulate mobile air emission sources. The provisions of Title II have resulted in tailpipe emission standards for vehicles, which have been strengthened in recent years to improve air quality. For example, the standards for NOX emissions have been lowered substantially, and the specification requirements for cleaner burning gasoline are more stringent.

Table 4.2-3. Ambient Air Quality Standards

		California Standards ^a	National Standards ^b	
Pollutant	Averaging Time	Concentration ^c	Primary ^{c,d}	Secondary ^{c,e}
03	1 hour	$0.09 \text{ ppm } (180 \mu\text{g/m}^3)$	_	Same as Primary
	8 hours	0.070 ppm (137 μg/m³)	0.070 ppm (137 μg/m³) ^f	Standard ^f
NO ₂ g	1 hour	0.18 ppm (339 μg/m³)	0.100 ppm (188 μg/m³)	Same as Primary Standard
	Annual Arithmetic Mean	0.030 ppm (57 μg/m ³)	0.053 ppm (100 μg/m³)	
СО	1 hour	20 ppm (23 mg/m ³)	35 ppm (40 mg/m ³)	None
	8 hours	9.0 ppm (10 mg/m ³)	9 ppm (10 mg/m ³)	
SO ₂ ^h	1 hour	0.25 ppm (655 μg/m ³)	0.075 ppm (196 μg/m³)	_
	3 hours	_	_	0.5 ppm (1,300 μg/m³)

Table 4.2-3. Ambient Air Quality Standards

		California Standardsa	National Standards ^b	
Pollutant	Averaging Time	Concentration ^c	Primary ^{c,d}	Secondary ^{c,e}
	24 hours	0.04 ppm (105 μg/m ³)	0.14 ppm (for certain areas) ^g	_
	Annual	_	0.030 ppm (for certain areas) ^g	_
PM_{10}^{i}	24 hours	50 μg/m ³	150 μg/m³	Same as Primary
	Annual Arithmetic Mean	20 μg/m ³	_	Standard
PM _{2.5} i	24 hours	_	35 μg/m ³	Same as Primary Standard
	Annual Arithmetic Mean	12 μg/m ³	12.0 μg/m ³	15.0 μg/m ³
Lead ^{j,k}	30-day Average	1.5 μg/m ³	_	_
	Calendar Quarter	_	1.5 μg/m³ (for certain areas) ^k	Same as Primary Standard
	Rolling 3-Month Average	_	0.15 μg/m ³	
Hydrogen sulfide	1 hour	0.03 ppm (42 μg/m ³)	_	_
Vinyl chloride ^j	24 hours	0.01 ppm (26 µg/m ³)	_	_
Sulfates	24- hours	25 μg/m ³	_	_
Visibility reducing particles	8 hour (10:00 a.m. to 6:00 p.m. PST)	Insufficient amount to produce an extinction coefficient of 0.23 per kilometer due to particles when the relative humidity is less than 70%	_	_

Source: CARB 2016b.

Notes: O_3 = ozone; $\mu g/m^3$ = micrograms per cubic meter; ppm = parts per million by volume; NO_2 = nitrogen dioxide; CO = carbon monoxide; mg/m^3 = milligrams per cubic meter; SO_2 = sulfur dioxide; PM_{10} = particulate matter with an aerodynamic diameter equal to or less than 10 microns; $PM_{2.5}$ = particulate matter with an aerodynamic diameter equal to or less than 2.5 microns; PST = Pacific Standard Time.

- California standards for O₃, CO, SO₂ (1-hour and 24-hour), NO₂, suspended particulate matter—PM₁₀, PM_{2.5}, and visibility-reducing particles, are values that are not to be exceeded. All others are not to be equaled or exceeded. CAAQS are listed in the Table of Standards in Section 70200 of Title 17 of the California Code of Regulations.
- National standards (other than O₃, NO₂, SO₂, particulate matter, and those based on annual averages or annual arithmetic mean) are not to be exceeded more than once a year. The O₃ standard is attained when the fourth highest 8-hour concentration measured at each site in a year, averaged over 3 years, is equal to or less than the standard. For PM₁₀, the 24-hour standard is attained when the expected number of days per calendar year with a 24-hour average concentration above 150 μg/m³ is equal to or less than one. For PM_{2.5}, the 24-hour standard is attained when 98% of the daily concentrations, averaged over 3 years, are equal to or less than the standard.
- Concentration expressed first in units in which it was promulgated. Equivalent units given in parentheses are based upon a reference temperature of 25°C and a reference pressure of 760 torr. Most measurements of air quality are to be corrected to a reference temperature of 25°C and a reference pressure of 760 torr; ppm in this table refers to ppm by volume, or micromoles of pollutant per mole of gas.
- National Primary Standards: The levels of air quality necessary, with an adequate margin of safety to protect the public health.
- National Secondary Standards: The levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.
- f On October 1, 2015, the primary and secondary NAAQS for O₃ were lowered from 0.075 ppm to 0.070 ppm

- To attain the 1-hour national standard, the 3-year average of the annual 98th percentile of the 1-hour daily maximum concentrations at each site must not exceed 100 parts per billion (ppb). Note that the national 1-hour standard is in units of ppb. California standards are in units of parts per million (ppm). To directly compare the national 1-hour standard to the California standards the units can be converted from ppb to ppm. In this case, the national standard of 100 ppb is identical to 0.100 ppm.
- On June 2, 2010, a new 1-hour SO₂ standard was established and the existing 24-hour and annual primary standards were revoked. To attain the 1-hour national standard, the 3-year average of the annual 99th percentile of the 1-hour daily maximum concentrations at each site must not exceed 75 ppb. The 1971 SO₂ national standards (24-hour and annual) remain in effect until 1 year after an area is designated for the 2010 standard, except that in areas designated nonattainment of the 1971 standards, the 1971 standards remain in effect until implementation plans to attain or maintain the 2010 standards are approved.
- On December 14, 2012, the national annual PM_{2.5} primary standard was lowered from 15 μ g/m³ to 12.0 μ g/m³. The existing national 24-hour PM_{2.5} standards (primary and secondary) were retained at 35 μ g/m³, as was the annual secondary standard of 15 μ g/m³. The existing 24-hour PM₁₀ standards (primary and secondary) of 150 μ g/m³ also were retained. The form of the annual primary and secondary standards is the annual mean, averaged over 3 years.
- ^j CARB has identified lead and vinyl chloride as toxic air contaminant (TACs) with no threshold level of exposure for adverse health effects determined. These actions allow for the implementation of control measures at levels below the ambient concentrations specified for these pollutants.
- The national standard for lead was revised on October 15, 2008, to a rolling 3-month average. The 1978 lead standard (1.5 µg/m³ as a quarterly average) remains in effect until one year after an area is designated for the 2008 standard, except that in areas designated nonattainment for the 1978 standard, the 1978 standard remains in effect until implementation plans to attain or maintain the 2008 standard are approved.

State

California Clean Air Act; California Air Resources Board

The California Clean Air Act (CCAA) requires all areas of California to achieve and maintain the CAAQS. CARB, a part of the California Environmental Protection Agency, is responsible for the coordination and administration of both Federal and State air pollution control programs within California. In this capacity, CARB conducts research, sets the CAAQS, compiles emission inventories, develops suggested control measures, and provides oversight of local programs. CARB establishes emissions standards for motor vehicles sold in California, consumer products (such as hairspray, aerosol paints, and barbecue lighter fluid), and various types of commercial equipment. It also sets fuel specifications to further reduce vehicular emissions. CARB has primary responsibility for the development of California's SIP, for which it works closely with the federal government and the local air districts. The SIP is required for the State to take over implementation of the federal CAA from the USEPA.

CAAQS are established to protect the health of the most sensitive groups and apply to the same criteria pollutants as the federal CAA and also includes State-identified criteria pollutants, which are sulfates, visibility-reducing particles, hydrogen sulfide, and vinyl chloride (CARB 2016). CARB has primary responsibility for ensuring the implementation of the CCAA, responding to the federal CAA planning requirements applicable to the State, and regulating emissions from motor vehicles and consumer products within the State.

Health and Safety Code Section 39607(e) requires CARB to establish and periodically review area designation criteria. Table 4.2-2, South Coast Air Basin Attainment Status, below provides a summary of the attainment status of the Los Angeles County portion of the Air Basin with respect to the State standards. The Air Basin is designated as attainment for the California standards for sulfates and unclassified for hydrogen sulfide and visibility-reducing particles. The Air Basin is currently in non-attainment for O₃, PM₁₀, and PM_{2.5} under the CAAQS. Since vinyl chloride is a carcinogenic toxic air contaminant, CARB does not classify attainment status for this pollutant.

Mobile Source Regulations

Mobile sources are a significant contributor to the air pollution in California. CARB has established exhaust emission standards for automobiles, which are more stringent than the federal emissions standards. Through its Mobile

Sources Program, CARB has developed programs and policies to reduce emissions from on-road heavy-duty diesel vehicles. Specifically, the Truck and Bus regulation requires diesel trucks and buses that operate in the State to reduce NOx, PM₁₀, and PM_{2.5} emissions (13 California Code of Regulations [CCR] Section 2025). California regulations contemplated that nearly all vehicles must have engines certified to 2010 model year engines or equivalent by January 1, 2023.

The Innovative Clean Transit Program (ICT) sets emissions reduction standards for new public transit vehicles and requires major transit agencies to only purchase zero emission (ZE) buses after 2029 (CARB 2024a). The Solid Waste Collection Vehicle Regulation requires solid waste collection vehicles and heavy diesel-fueled on-road single engine cranes to be upgraded (CARB 2024b). The Rule for On-Road Heavy-Duty Diesel-Fueled Public and Utility Fleets requires fleets to install emission control devices on vehicles or purchase vehicles that run on alternative fuels or use advanced technologies to achieve emissions requirements by specified implementation dates (CARB 2024c). CARB also established an In-Use Off-Road Diesel-Fueled Fleets Regulation to impose limits on idling and require fleets to retrofit or replace older engines (CARB 2024d).

California Code of Regulations

The California Code of Regulations (CCR) codifies regulations promulgated by various California agencies pursuant to the Administrative Procedure Act. The CCR includes regulations that govern air quality emissions. Specifically, 13 CCR Section 2485 limits idling of all diesel-fueled commercial vehicles (weighing over 10,000 pounds) during construction to five minutes at any location. In addition, 17 CCR Section 93115 mandates that operations of any stationary, diesel-fueled, compression-ignition engines meet specified fuel and fuel additive requirements and emissions standards.

On-Road and Off-Road Vehicle Rules

In 2004, CARB adopted an Airborne Toxic Control Measure (ATCM) to limit heavy-duty diesel motor vehicle idling in order to reduce public exposure to diesel PM and other TACs (13 CCR Section 2485). The regulation applies to diesel-fueled commercial vehicles with gross vehicle weight ratings (GVWR) greater than 10,000 pounds that are licensed to operate on highways, regardless of where they are registered. This regulation does not allow diesel-fueled commercial vehicles to idle for more than five minutes at any given time.

In 2008 CARB approved the Truck and Bus regulation to reduce NOx, PM_{10} , and $PM_{2.5}$ emissions from existing diesel vehicles operating in California (13 CCR Section 2025). The requirements were amended to apply to nearly all diesel-fueled trucks and busses with a GVWR greater than 14,000 pounds. For the largest trucks in the fleet, those with a GVWR greater than 26,000 pounds, all must be equipped with diesel particulate filters (DPFs) from 2014 and onward and must have 2010 model year engines by January 1, 2023. For trucks and buses with a GVWR of 14,001 to 26,000 pounds, those with engine model years 14 to 20 years or older must be replaced with 2010 model year engines in accordance with the schedule specified in the regulation.

In addition to limiting exhaust from idling trucks, CARB also promulgated emission standards for off-road diesel construction equipment of greater than 25 horsepower such as bulldozers, loaders, backhoes and forklifts, as well as many other self-propelled off-road diesel vehicles. The regulations adopted by the CARB in 2007, reduces emissions by requiring the installation of diesel soot filters and the retirement, replacement, or repowering of older, dirtier engines with newer emission-controlled models (13 CCR Section 2449). Implementation is staggered based on fleet size (which is the total of all off-road horsepower under common ownership or control), with the largest fleets to begin compliance in 2014, medium fleets in 2017, and small fleets in 2019. Each fleet must demonstrate

compliance through one of two methods. The first option is to calculate and maintain fleet average emissions targets, which encourages the retirement or repowering of older equipment and rewards the introduction of newer cleaner units into the fleet. The second option is to meet the Best Available Control Technology (BACT) requirements by turning over or installing Verified Diesel Emission Control Strategies (VDECS) on a certain percentage of its total fleet horsepower. The compliance schedule requires that BACT turn overs or retrofits (VDECS installation) be fully implemented by 2023 in all equipment for large and medium fleets and by 2028 for small fleets.

In 2020, the Advanced Clean Trucks (ACT) regulation was implemented by CARB, which mandates zero-emission vehicle (ZEV) sales requirements for truck manufacturers and a one-time reporting requirement for large entities and fleets (CARB 2024e). The regulation is designed to accelerate widespread adoption of ZEVs in the mediumand heavy-duty truck sector to reduce on-road mobile source emissions on the path to carbon neutrality by 2045 (EO B-55-18), Starting in 2024, zero-emission powertrain certification will be required. Vehicle classes separate vehicles by their GVWR, maximum weight, and classes range from 1 to 8. However, in the context of ACT, Class 2b-3 group includes on-road vehicles with a GVWR that is 8,501 pounds up to 14,000 pounds; Class 4-8 group includes on-road vehicles with a GVWR that is 14,001 pounds and above, including "yard tractors"; and Class 7-8 group includes on-road vehicles that have a GVWR 26,001 pounds and above, including vehicles defined as "tractors" (CARB 2024e). The ACT has different truck sales requirement for the different vehicle groups. Manufacturers will need to increase their percentage of ZEVs in order to achieve 55 percent of Class 2b-3 truck sales, 75 percent of Class 4-8 Vocational straight truck sales, and 40 percent of Class 7-8 Tractor sales by 2035. Currently, there are over 70 different models of ZE vans, trucks, and buses commercially available (CARB 2024e). Most recently, in 2020, Governor Gavin Newsom announced Executive Order N-79-20 stating that 100 percent of new passenger cars and 100 percent of operations for drayage trucks and off-road vehicles and equipment must be ZE by 2035. By 2045, 100 percent of operations of medium- and heavy-duty vehicles must be ZE (JD Supra 2020).

Toxic Air Contaminants

The California Air Toxics Program was established in 1983, when the California Legislature adopted AB 1807 to establish a two-step process of risk identification and risk management to address potential health effects from exposure to toxic substances in the air. In the risk identification step, CARB and OEHHA determine if a substance should be formally identified, or "listed," as a TAC in California. Since the inception of the program, a number of such substances have been listed (www.arb.ca.gov/toxics.id/taclist.htm). In 1993, the California Legislature amended the program to identify the 189 federal hazardous air pollutants (HAPs) as TACs.

The greatest potential for TAC emissions during construction would be related to DPM emissions associated with heavy-duty equipment during demolition, excavation, and grading activities. Construction activities associated with the proposed project would be sporadic, transitory, and short term in nature. The OEHHA is responsible for developing and revising guidelines for performing health risk assessments (HRAs) under the State's the Air Toxics "Hot Spots" Program Risk Assessment regulation. In March 2015, OEHHA adopted revised guidelines that update the previous guidance by incorporating advances in risk assessment with consideration of infants and children using age-sensitivity factors (ASF) (OEHHA 2015). The analysis of potential construction TAC impacts considers the OEHHA revised guidelines as well as the duration of construction, level of construction activity, scale of the proposed project, and compliance with regulations that would minimize construction TAC emissions. In the risk management step, CARB reviews emission sources of an identified TAC to determine whether regulatory action is needed to reduce risk. Based on the results of that review, CARB has promulgated a number of ATCMs, both for mobile and stationary sources (see discussion of On-road and Off-Road Vehicle Rules, above).

The AB 1807 program is supplemented by the AB 2588 Air Toxics "Hot Spots" program, which was established by the California Legislature in 1987. Under this program, facilities are required to report their air toxics emissions, assess health risks, and notify nearby residents and workers of significant risks if present. In 1992, the AB 2588 program was amended by Senate Bill (SB) 1731 to require facilities that pose a significant health risk to the community to reduce their risk through implementation of a risk management plan.

Local

The SCAQMD is primarily responsible for planning, implementing, and enforcing air quality standards for the South Coast Air Basin (Air Basin) which includes all of Orange County, Los Angeles County (excluding the Antelope Valley portion), the western, non-desert portion of San Bernardino County, and the western Coachella Valley and San Gorgonio Pass portions of Riverside County. The Air Basin is an approximately 6,745-square-mile area bounded by the Pacific Ocean to the west and the San Gabriel, San Bernardino, and San Jacinto Mountains to the north and east. The Air Basin is a subregion within the western portion of the SCAQMD jurisdiction.

Air Quality Management Plan

The SCAQMD has adopted Air Quality Management Plans (AQMPs) to meet the CAAQS and NAAQS. Most recently, SCAQMD has initiated the development of the 2022 AQMP to address the attainment of the 2015 8-hour ozone standard (70 part per billion [ppb]) for the Air Basin and Coachella Valley. The Air Basin is classified as an "extreme" non-attainment area and the Coachella Valley is classified as a "severe-15" non-attainment area for the 2015 Ozone NAAQS. In 2021, SCAQMD and CARB established Mobile Source Working Groups to support the development of mobile source strategies. SCAQMD also established Residential and Commercial Buildings Working Groups to support the development of control measures.

The SCAQMD Governing Board adopted the 2016 AQMP on March 3, 2017 (SCAQMD 2017a). CARB approved the 2016 AQMP on March 23, 2017 (CARB 2017). Key elements of the 2016 AQMP include implementing fair-share emissions reductions strategies at the federal, State, and local levels; establishing partnerships, funding, and incentives to accelerate deployment of zero and near-zero-emissions technologies; and taking credit from cobenefits from greenhouse gas, energy, transportation and other planning efforts (SCAQMD 2017a). The strategies included in the 2016 AQMP build on the strategies from the previous 2012 AQMP and are intended to demonstrate attainment of the NAAQS, which are set at levels considered safe to protect public health, including the health of sensitive populations such as asthmatics, children, and the elderly with a margin of safety; and to protect public welfare, including against decreased visibility and damage to animals, crops, vegetation, and buildings (USEPA 2021i), for the federal non-attainment pollutants ozone and PM_{2.5} while accounting for regional growth, increasing development, and maintaining a healthy economy (SCAQMD 2016). In general, SCAQMD's criteria for evaluating control strategies for stationary and mobile sources is based on the following: (1) cost-effectiveness; (2) emissions reduction potential; (3) enforceability; (4) legal authority; (5) public acceptability; (6) rate of emission reduction; and (7) technological feasibility.

Control strategies in the AQMP with potential applicability to reducing short-term emissions from construction activities associated with the Project include strategies denoted in the 2016 AQMP as MOB-08 and MOB-10, which are intended to reduce emissions from on-road and off-road heavy-duty vehicles and equipment (SCAQMD 2017a). Descriptions of measures MOB-08 and MOB-10 are provided below:

MOB-08 – Accelerated Retirement of Older On-Road Heavy-Duty Vehicles: This measure seeks to replace up to 2,000 heavy-duty vehicles per year with newer or new vehicles that at a minimum, meet the 2010 on-road heavy-duty NOX exhaust emissions standard of 0.2 grams per brake horsepower-hour (g/bhp-hr).

MOB-10 – Extension of the SOON Provision for Construction/Industrial Equipment: This measure continues the Surplus Off-Road Option for NOX (SOON) provision of the statewide In-Use Off-Road Fleet Vehicle Regulation through the 2031 timeframe.

The 2016 AQMP is used in the following air quality analyses since it has been adopted by both SCAQMD and CARB.

SCAQMD Air Quality Guidance Documents

SCAQMD's California Environmental Quality Act (CEQA) guidelines are voluntary initiatives recommended for consideration by local planning agencies. The *CEQA Air Quality Handbook* (Handbook) published by SCAQMD provides local governments with guidance for analyzing and mitigating project-specific air quality impacts (SCAQMD 1993a). SCAQMD is currently updating some of the information and methods in the Handbook, such as the screening tables for determining the air quality significance of a project and the on-road mobile source emission factors. While this process is underway, SCAQMD recommends using other approved models to calculate emissions from land use projects, such as California Emissions Estimator Model (CalEEMod Version 2020.4.0) (SCAQMD 2017b).

The SCAQMD's Guidance Document for Addressing Air Quality Issues in General Plans and Local Planning considers impacts to air quality sensitive receptors from TAC-emitting facilities (SCAQMD 2005). SCAQMD's siting distance recommendations are the same as those provided by CARB (e.g., a 500-foot siting distance for air quality sensitive receptors proposed in proximity to freeways and high-traffic roads, and the same siting criteria for distribution centers and dry-cleaning facilities).

The SCAQMD Final Localized Significance Threshold Methodology and Final Methodology to Calculate Particulate Matter (PM)_{2.5} and PM_{2.5} Significance Thresholds provides guidance when evaluating the localized effects of emissions in the CEQA evaluation (SCAQMD 2008a, SCAQMD 2006). These guidance documents were promulgated by the SCAQMD Governing Board as a tool to assist lead agencies to analyzed localized impacts associated with project-specific level proposed projects. The guidance documents establish mass emission rate "look up tables" as significance thresholds for projects that are five acres or less. For projects that are larger than five acres it is recommended that project-specific air quality dispersion modeling is completed to determine localized air quality.

SCAQMD Rules and Regulations

The SCAQMD has adopted many rules and regulations to regulate sources of air pollution in the Air Basin and to help achieve air quality standards. The project may be subject to the following SCAQMD rules and regulations:

Regulation IV - Prohibitions: This regulation sets forth the restrictions for visible emissions, odor nuisance, fugitive dust, various air emissions, fuel contaminants, start-up/shutdown exemptions and breakdown events. The following is a list of rules which apply to the project:

Rule 401 – Visible Emissions: This rule states that a person shall not discharge into the atmosphere from any single source of emission whatsoever any air contaminant for a period or periods aggregating

- more than three minutes in any one hour which is as dark or darker in shade as that designated No. 1 on the Ringelmann Chart or of such opacity as to obscure an observer's view.
- Rule 402 Nuisance: This rule states that 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.
- Rule 403 Fugitive Dust: This rule requires projects to prevent, reduce or mitigate fugitive dust emissions from a site. Rule 403 restricts visible fugitive dust to the project property line, restricts the net PM₁₀ emissions to less than 50 micrograms per cubic meter (µg/m³) and restricts the tracking out of bulk materials onto public roads. Additionally, projects must utilize one or more of the best available control measures (identified in the tables within the rule). Mitigation measures may include adding freeboard to haul vehicles, covering loose material on haul vehicles, watering, using chemical stabilizers and/or ceasing all activities. Finally, a contingency plan may be required if so determined by USEPA.
- Regulation XI Source Specific Standards: Regulation XI sets emissions standards for specific sources. The following is a list of rules which may apply to the project:
 - Rule 1113 Architectural Coatings: This rule requires manufacturers, distributors, and end users of architectural and industrial maintenance coatings to reduce VOC emissions from the use of these coatings, primarily by placing limits on the VOC content of various coating categories.
 - Rule 1121 Control of Nitrogen Oxides from Residential Type, Natural Gas-Fired Water Heaters: This rule specifies NO_X emission limits for natural gas-fired water heaters, with heat input rates less than 75,000 British thermal units (BTUs) per hour.
 - Rule 1186 PM10 Emissions from Paved and Unpaved Roads, and Livestock Operations: This rule applies to owners and operators of paved and unpaved roads and livestock operations. The rule is intended to reduce PM₁₀ emissions by requiring the cleanup of material deposited onto paved roads, use of certified street sweeping equipment, and treatment of high-use unpaved roads (see also Rule 403).
- Regulation XIV Toxics and Other Non-Criteria Pollutants: Regulation XIV sets requirements for new permit units, relocations, or modifications to existing permit units which emit toxic air contaminants or other non-criteria pollutants. The following is a list of rules which may apply to the project:
 - Rule 1401 and Rule 1402 New Source Review of Toxic Air Contaminants and Control of Toxic Air Contaminants from Existing Sources: SCAQMD has adopted two rules to limit cancer and non-cancer health risks from facilities located within its jurisdiction. Rule 1401 (New Source Review of Toxic Air Contaminants) regulates new or modified facilities, and Rule 1402 (Control of Toxic Air Contaminants from Existing Sources) regulates facilities that are already operating. Rule 1402 incorporates the requirements of the AB 2588 program, including implementation of risk reduction plans for significant risk facilities.

Rule 1403 – Asbestos Emissions from Demolition/Renovation Activities: This rule requires owners and operators of any demolition or renovation activity and the associated disturbance of asbestos-containing materials, any asbestos storage facility, or any active waste disposal site to implement work practice requirements to limit asbestos emissions from building demolition and renovation activities, including the removal and associated disturbance of asbestos-containing materials.

Rule 1470 - Requirements for Stationary Diesel-Fueled Internal Combustion and Other Compression Ignition Engines: This rule applies to stationary compression ignition (CI) engine greater than 50 brake horsepower and sets limits on emissions and operating hours. In general, new stationary emergency standby diesel-fueled engines greater than 50 brake horsepower are not permitted to operate more than 50 hours per year for maintenance and testing.

Southern California Association of Governments

The Southern California Association of Governments (SCAG) is the regional planning agency for Los Angeles, Orange, Ventura, Riverside, San Bernardino and Imperial Counties, and addresses regional issues relating to transportation, the economy, community development and the environment. SCAG is the federally designated Metropolitan Planning Organization (MPO) for the majority of the Southern California region and is the largest MPO in the nation.

Pursuant to Health & Safety Code Section 40460, SCAG is responsible for preparing and approving the portions of the AQMP relating to regional demographic projections and integrated regional land use, housing, employment and transportation programs, measures and strategies (SCAQMD 2017a). On September 3, 2020, the SCAG's Regional Council formally adopted the 2020-2045 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) also known as the Connect SoCal, which is an update to the previous 2016-2040 RTP/SCS (SCAG 2020a). Using growth forecasts and economic trends, the 2020–2045 RTP/SCS provides a vision for transportation throughout the region for the next several decades by considering the role of transportation in the broader context of economic, environmental, and quality-of-life goals for the future, identifying regional transportation strategies to address mobility needs. Additionally, the 2020-2045 RTP/SCS describes how the region can attain the GHG emission-reduction targets set by CARB by achieving an 8 percent reduction in per capita transportation GHG emissions by 2020 and a 19 percent reduction in per capita transportation emissions by 2035 compared to the 2005 level on a per capita basis (SCAG 2020a). Compliance with and implementation of the 2020-2045 RTP/SCS policies and strategies would have co-benefits of reducing per capita criteria air pollutant emissions (e.g. nitrogen dioxide, carbon monoxide) associated with reduced per capita vehicle miles traveled (VMT).

SCAG's 2016-2040 RTP/SCS and the 2020-2045 RTP/SCS provides specific strategies for implementation. These strategies include supporting projects that encourage diverse job opportunities for a variety of skills and education, recreation and cultures and a full-range of shopping, entertainment and services all within a relatively short distance; encouraging employment development around current and planned transit stations and neighborhood commercial centers; encouraging the implementation of a "Complete Streets" policy that meets the needs of all users of the streets, roads and highways including bicyclists, children, persons with disabilities, motorists, electric vehicles, movers of commercial goods, pedestrians, users of public transportation, and seniors; and supporting alternative fueled vehicles (SCAG 2020a).

In addition, both the 2016-2040 RTP/SCS and the 2020-2045 RTP/SCS includes strategies to promote active transportation, support local planning and projects that serve short trips, promote transportation investments, investments in active transportation, more walkable and bikeable communities, that will result in improved air quality and public health, and reduced greenhouse gas emissions, and supports building physical infrastructure,

regional greenways and first-last mile connections to transit, including to light rail and bus stations. The 2016-2040 RTP/SCS and the 2020-2045 RTP/SCS aligns active transportation investments with land use and transportation strategies, increase competitiveness of local agencies for federal and state funding, and to expand the potential for all people to use active transportation. CARB has accepted the SCAG GHG quantification determinations in the 2016-2040 RTP/SCS and the 2020-2045 RTP/SCS and both demonstrate achievement of the GHG emission reduction targets established by CARB (SCAG 2020a, CARB 2020).

Although there are GHG emission reduction targets for passenger vehicles set by CARB for 2045, the 2020-2045 RTP/SCS GHG emission reduction trajectory shows that more aggressive GHG emission reductions are projected for 2045. By meeting and exceeding the SB 375 targets for 2020 and 2035, as well as achieving an additional 4.1-percent reduction in GHG from transportation-related sources in the ten years between 2035 and 2045, the 2020-2045 RTP/SCS is expected to fulfill and exceed its portion of SB 375 compliance with respect to meeting the State's GHG emission reduction goals (SCAG 2020b).

City of Santa Clarita General Plan

The City is responsible for assessing and mitigating air emissions resulting from its land use decisions. The City is also responsible for the implementation of transportation control measures as outlined in the AQMP. The AQMP assigns local governments certain responsibilities to assist the Air Basin in meeting air quality goals and policies. The City of Santa Clarita has identified air quality goals, policies, and implementation measures in its Conservation and Open Space Element of the 2011 General Plan. Applicable goals, policies, and objectives of the City's General Plan Conservation and Open Space element are specified below as being the most current standards.

- Goal CO-7: Air Quality. Clean air to protect human health and support healthy ecosystems.
 - Objective CO-7.1: Reduce air pollution from mobile sources.
 - Policy CO-7.1.1: Through the mixed land use patterns and multi-modal circulation policies set forth in the Land Use and Circulation Elements, limit air pollution from transportation sources.
 - Policy CO-7.1.2: Support the use of alternative fuel vehicles.
 - Policy CO-7.1.3: Support alternative travel modes and new technologies, including infrastructure to support alternative fuel vehicles, as they become commercially available.
 - Objective CO 7.2: Apply guidelines to protect sensitive receptors from sources of air pollution as developed by the CARB, where appropriate.
 - Policy CO-7.2.1: Ensure adequate spacing of sensitive land uses from the following sources of air pollution: high traffic freeways and roads; distribution centers; truck stops; chrome plating facilities; dry cleaners using perchloroethylene; and large gas stations, as recommended by CARB.
 - Objective CO 7.3: Coordinate with other agencies to plan for and implement programs for improving air quality in the South Coast Air Basin.
 - Policy CO-7.3.1: Coordinate with local, regional, state and federal agencies to develop and implement regional air quality policies and programs.

4.2.3 Thresholds of Significance

The significance criteria used to evaluate the project impacts to air quality are based on Appendix G of the California Environmental Quality Act (CEQA) Guidelines. According to Appendix G of the CEQA Guidelines, a significant impact related to air quality would occur if the project would:

- 1. Conflict with or obstruct implementation of the applicable air quality plan.
- 2. Result in a cumulatively considerable new increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard.
- 3. Expose sensitive receptors to substantial pollutant concentrations.
- 4. Result in other remissions (such as those leading to odors) adversely affecting a substantial number of people.

Additionally, the City of Santa Clarita's Local Guidelines include the following additional City-specific threshold related to air quality, in which a significant impact would occur if the project would exceed (City of Santa Clarita 2005):

5. The most recent air quality thresholds as determined by the South Coast Air Quality Management District, as published in its "Air Quality Analysis Guidance Handbook."

Appendix G of the CEQA Guidelines indicates that, where available, the significance criteria established by the applicable air quality management district or pollution control district may be relied upon to determine whether the project would have a significant impact on air quality. The SCAQMD CEQA Air Quality Handbook, as revised in March 2019, sets forth quantitative emission significance thresholds below which a project would not have a significant impact on ambient air quality. Project-related air quality impacts estimated in this environmental analysis would be considered significant if any of the applicable significance thresholds presented in Table 4.2-4 were exceeded.

A project would result in a substantial contribution to an existing air quality violation of the NAAQS or CAAQS for O_3 (see Table 4.2-2), which is a nonattainment pollutant, if the project's construction or operational emissions would exceed the SCAQMD VOC or NO_x thresholds shown in Table 4.2-4. These emission-based thresholds for O_3 precursors are intended to serve as a surrogate for an O_3 significance threshold (i.e., the potential for adverse O_3 impacts to occur) because O_3 itself is not emitted directly (see the previous discussion of O_3 and its sources), and the effects of an individual project's emissions of O_3 precursors (VOC and NO_x) on O_3 levels in ambient air cannot be determined through air quality models or other quantitative methods.

Table 4.2-4. South Coast Air Quality Management District Air Quality Significance Thresholds

Pollutant	Construction	Operation			
Criteria Pollutants Mass Daily Thresholds					
VOCs	75 lb/day	55 lb/day			
NO _x	100 lb/day	55 lb/day			
CO	550 lb/day	550 lb/day			
SO _x	150 lb/day	150 lb/day			
PM ₁₀	150 lb/day	150 lb/day			
PM _{2.5}	55 lb/day	55 lb/day			
Leada	3 lb/day	3 lb/day			

Table 4.2-4. South Coast Air Quality Management District Air Quality Significance Thresholds

Pollutant	Construction	Operation	
TACs and Odor Thresholds			
TACs ^b	Maximum incremental cancer risk \geq 10 in 1 million Cancer burden for cancer risk > 1 in 1 million Chronic and acute hazard index \geq 1.0 (project increment)		
Odor	Project creates an odor nuisance purs	suant to SCAQMD Rule 402	
Ambient Air Quality Standards fo	r Criteria Pollutantsº		
NO ₂ 1-hour average NO ₂ annual arithmetic mean	SCAQMD is in attainment; project is significant if it causes or contributes to an exceedance of the following attainment standards: 0.18 ppm (state) 0.030 ppm (state) and 0.0534 ppm (federal)		
CO 1-hour average CO 8-hour average	SCAQMD is in attainment; project is s to an exceedance of the following atta 20 ppm (state) and 35 ppm (federal) 9.0 ppm (state/federal)		
PM ₁₀ 24-hour average	10.4 μg/m³ (construction) ^d		
PM ₁₀ annual average	2.5 μg/m³ (operation) 1.0 μg/m³		
PM _{2.5} 24-hour average	10.4 μg/m³ (construction) ^d 2.5 μg/m³ (operation)		

Source: SCAOMD 2015.

Notes: VOC = volatile organic compounds; Ib/day = pounds per day; NO_x = oxides of nitrogen; CO = carbon monoxide; SO_x = sulfur oxides; PM₁₀ = particulate matter with an aerodynamic diameter equal to or less than 10 microns; PM_{2.5} = particulate matter with an aerodynamic diameter equal to or less than 2.5 microns; TAC = toxic air contaminant; SCAQMD = South Coast Air Quality Management District; NO₂ = nitrogen dioxide; ppm = parts per million; μ g/m³ = micrograms per cubic meter.

The phase-out of leaded gasoline started in 1976. Since gasoline no longer contains lead, the proposed project is not anticipated to result in impacts related to lead; therefore, it is not discussed in this analysis.

b TACs include carcinogens and non-carcinogens.

Ambient air quality standards for criteria pollutants based on SCAQMD Rule 1303, Table A-2, unless otherwise stated.

d Ambient air quality threshold based on SCAQMD Rule 403.

In addition to the emission-based thresholds in Table 4.2-4, the SCAQMD also recommends the evaluation of localized air quality impacts to sensitive receptors in the immediate vicinity of the project as a result of construction and operation activities. Such an evaluation is referred to as a localized significance threshold (LST) analysis. The LST significance thresholds for NO_2 and CO represent the allowable increase in concentrations above background levels in the vicinity of a project that would not cause or contribute to an exceedance of the relevant ambient air quality standards, while the threshold for PM_{10} represents compliance with Rule 403 (Fugitive Dust). The LST significance threshold for $PM_{2.5}$ is intended to ensure that construction emissions do not contribute substantially to existing exceedances of the $PM_{2.5}$ ambient air quality standards. The allowable emission rates depend on the following parameters:

- A. Source receptor area (SRA) in which the project is located
- B. Size of the project site
- C. Distance between the project site and the nearest sensitive receptor (e.g., residences, schools, hospitals)

Based on the project location, LSTs for SRA 13 (Santa Clarita Valley) would be applicable. Localized construction emissions generated during the development of the project are quantified and included in the following analysis. The analysis uses the LSTs for a 5.0-acre site in SRA 13 with sensitive receptors located adjacent to the construction area. The LSTs applicable to construction and operation of the project are shown in Table 4.2-5. Notably, if localized emissions exceed the applicable LSTs and refined dispersion modeling is required, the most stringent NAAQS or CAAQS (included in Table 4.2-2) would be used as the threshold of significance.

Table 4.2-5. Localized Significance Thresholds for the Project

Pollutant	Threshold ^{a,b} (pounds/day)
NOx	246
CO	1,644
PM ₁₀	12
PM _{2.5}	6

Source: SCAQMD 2008a. See also Appendix B of this EIR for a description of localized significance threshold (LST) determination. Notes: NO_x = oxides of nitrogen; CO = carbon monoxide; PM_{10} = particulate matter with an aerodynamic diameter equal to or less than 10 microns; $PM_{2.5}$ = particulate matter with an aerodynamic diameter equal to or less than 2.5 microns; NO_2 = nitrogen dioxide.

4.2.4 Methodology

The evaluation of potential impacts to regional and local air quality that may result from the construction and long-term operations of the project is discussed below.

Consistency with General Plan – Conservation and Open Space Element

The City's General Plan Conservation and Open Space Element includes Citywide goals, objectives, and policies that guide the City in the implementation of its air quality improvement programs and strategies. Goals, objectives, and polices of the City's General Plan Conservation and Open Space Element relevant to the project include reducing pollution and mobile source emissions through coordinated land use, transportation and air quality planning, and minimizing fugitive dust from different sources, activities, and uses, as well as reducing air pollutant emissions consistent with the AQMP. The analysis below provides a discussion of the relevant provisions in the City's General Plan Conservation and Open Space Element with the project to determine the whether the project would be consistent with those provisions.

Consistency with Air Quality Management Plan

The SCAQMD is required, pursuant to the CAA, to reduce emissions of criteria pollutants for which the Air Basin is in non-attainment of the NAAQS (e.g., ozone and PM2.5).² The SCAQMD's 2016 AQMP contains a comprehensive list of pollution control strategies directed at reducing emissions and achieving NAAQS related to these pollutants, including transportation control strategies from SCAG's 2016-2040 RTP/SCS designed to reduce VMT (SCAQMD 2017a). The 2016 AQMP control strategies were developed, in part, based on regional growth projections prepared

a SCAOMD localized significance thresholds are shown for a 5-acre project site.

Allowable emissions are the maximum emissions that will not cause or contribute to an exceedance of the most stringent applicable federal or state ambient air quality standard (based on site size and distance to receptor).

The Los Angeles County portion of the Air Basin is designated as nonattainment for the federal lead standard; however, this was due to localized emissions from two lead-acid battery recycling facilities in the City of Vernon and the City of Industry that are no longer operating. For reference see South Coast Air Quality Management District, Board Meeting, Agenda No. 30, Adopt the 2012 Lead State Implementation Plan for Los Angeles County, May 4, 2012. http://beta.aqmd.gov/docs/default-source/clean-air-plans/lead-state-implementation-plan/adoption-of-2012-lead-sip.pdf?sfvrsn=2, Accessed October 27, 2021.

by SCAG (SCAQMD 2017a). For this reason, projects whose growth is consistent with the assumptions used in the 2016 AQMP will be deemed to be consistent with the 2016 AQMP because their growth has already been included in the growth projections utilized in the formulation of the control strategies in the 2016 AQMP. Thus, emissions from projects, uses, and activities that are consistent with the applicable growth projections and control strategies used in the development of the 2016 AQMP would not jeopardize attainment of the air pollutant reduction goals identified in the AQMP even if their emissions exceed the SCAQMD's numeric indicators (SCAQMD 1993a). As noted above, the 2016 AQMP has been adopted by the SCAQMD and CARB. Therefore, consistency with the 2016 AQMP is evaluated based on consistency with its applicable growth projections and emission control strategies.

Construction

Construction air quality impacts were assessed based on the incremental increase in emissions compared to baseline conditions. Under CEQA, the baseline environmental setting is defined as a description of the physical environmental conditions as they exist at the time environmental analysis is commenced.

Project construction activities that would have the potential to create regional air quality impacts including the use of off-road equipment for construction activities, vehicle trips generated by construction workers, vendor trucks, and haul trucks traveling to and from the project site and building activities including the application of paint and other surface coatings. The project's daily regional criteria pollutant emissions during construction have been estimated by assuming a conservative scenario for construction activities (i.e., assuming all construction occurs at the earliest feasible date) and applying the mobile source and fugitive dust emissions factors. The emissions have been estimated using the CalEEMod software, an emissions inventory software program recommended by the SCAQMD and the CARB on-road vehicle emissions factor model (EMFAC2021). CalEEMod is based on outputs from the CARB off-road emissions factor (OFFROAD) and EMFAC models, which are emissions estimation models developed by CARB and used to calculate emissions from construction activities, including on- and off-road vehicles. Within CalEEMod, fugitive dust emissions include the application of water as a control measure consistent with SCAQMD Rule 403, which applies to the project's construction activities. Fugitive dust control measures are not mitigation under CEQA because they are regulatory compliance. Construction phasing details are provided in the Air Quality Technical Report, included in Appendix B of this EIR.

The input values used in this analysis were adjusted to be project-specific based on equipment types and the construction schedule. The project is not expected to export soil however approximately 85,000 cubic yards of soil would be imported on-site. Worker, vendor and concrete truck trips estimates were based on information obtained from the Applicant. Emissions from on-road vehicles were estimated outside of CalEEMod using EMFAC2021 emission factors.

Emissions from project construction activities were estimated based on the construction phase in which the activity would be occurring. The maximum daily emissions were predicted values for the worst-case day and do not represent the emissions that would occur for every day of project construction. The maximum daily emissions were compared to SCAQMD daily regional numeric indicators.

Project construction activities that would have the potential to create local air quality impacts include fugitive dust from grading, excavation and demolition and building activities such as the application of paint and other surface coatings. The localized effects from the on-site portion of the project's construction emissions were evaluated at the nearby sensitive receptor locations that would be potentially impacted by project construction in accordance with the SCAQMD's *Final Localized Significance Threshold Methodology* (June 2003, revised July 2008) (SCAQMD 2008a). The localized significance thresholds only address NOx, CO, PM₁₀, and PM_{2.5} emissions. The SCAQMD has

established screening criteria that can be used to determine the maximum allowable daily emissions that would satisfy the localized significance thresholds and therefore not cause or contribute to an exceedance of the applicable ambient air quality standards without the need for project-specific dispersion modeling. The localized analysis for the project is based on this SCAQMD screening criteria. The project site is approximately 30 acres; however, approximately 18 acres of the project site would be utilized, the remainder of the site will be left as open space. It was assumed that no more than 5-acres would be disturbed on any given day. The project site is located in the SCAQMD's Santa Clarita Valley Source Receptor Area 13. In order to provide a conservative assessment of localized construction and operational emissions, the screening criteria used in the analysis were those applicable for a 5-acre site in the Santa Clarita Valley area with sensitive receptors located 25 meters away, which accounts for all adjacent off-site sensitive receptors (SCAQMD 2008a). The maximum net daily emissions from construction of the project were compared to these screening criteria.

In addition, according to the SCAQMD Final Localized Significance Threshold Methodology, "projects whose calculated emission budgets for the proposed construction or operational activities are above the LST emission levels found in the LST mass rate look-up tables should not assume that the project would necessarily generate adverse impacts. Detailed air dispersion modeling may demonstrate that pollutant concentrations are below localized significant levels. (SCAQMD 2008)." Therefore, for any of the pollutants that the project exceeds the applicable LSTs, the localized significance for project air pollutant emissions was determined by performing dispersion modeling to determine if the pollutant concentrations would exceed relevant significance thresholds established by the SCAQMD. The analysis incorporates the estimated construction emissions and dispersion modeling using the USEPA AMS/EPA Regulatory Model (AERMOD) model, version 21112, with meteorological data from the closest SCAQMD monitoring station, which is located in Van Nuys.

Project construction is estimated to start in 2025 but may commence at a later date. If this occurs, construction impacts would be lower than those analyzed here due to the use of a more energy-efficient and cleaner burning construction vehicle fleet mix, pursuant to State regulations that require vehicle fleet operators to phase-in less polluting heavy-duty equipment. As a result, should project construction commence at a later date than analyzed in this analysis, air quality impacts would be lower than the impacts disclosed herein.

Operation

The project's operational emissions were estimated using the CalEEMod software, with EMFAC values updated to reflect the EMFAC2021 emission factors for mobile emissions. CalEEMod was used to forecast the daily regional criteria pollutant emissions from on-site area and stationary sources that would occur during long-term project operations. For mobile sources, the estimated vehicle trips were provided for the project uses in a project specific traffic study (included as Appendix K to this EIR) (Stantec 2022).

Operation of the project has the potential to generate criteria pollutant emissions through vehicle and truck trips traveling to and from the project site. In addition, emissions would result from area sources located on-site such as natural gas combustion from water heaters, boilers, and cooking stoves, landscaping equipment, and use of consumer products. The project is not expected to contain any large stationary combustion equipment such as large boilers or combustion turbines. Natural gas usage factors in CalEEMod are based on the CEC 2002 CEUS data

Using the screening criteria applicable for a 5-acre site is conservative because the localized significance thresholds are project site-dependent and the allowable thresholds increase with increasing project size. Therefore, using a 5-acre site threshold instead of the Project Site's proposed development area of 18 acres yields a more stringent analysis.

adjusted to reflect more recent Title 24 of the California Code of Regulations (California Building Standards Code) improvements.

As discussed above, for the purposes of this analysis, no existing operational air quality emissions are assumed because the site is currently vacant. Therefore, existing operational air quality emissions are not required to be calculated and the project's air quality emissions would conservatively be considered net new. The maximum daily emissions from operation of the project are compared to the SCAQMD daily regional numeric indicators.

The localized effects from the on-site portion of the maximum daily net emissions from project operation were evaluated at the nearby sensitive receptor locations that would be potentially impacted by operation of the project according to the SCAQMD's *Final Localized Significance Threshold Methodology* (SCAQMD 2008a). The localized impacts from operation of the project were assessed similar to the construction emissions, as discussed previously.

The greatest quantities of CO are produced from motor vehicle combustion and are usually concentrated at or near ground level because they do not readily disperse into the atmosphere, particularly under cool, stable (i.e., low or no wind) atmospheric conditions. Localized areas where ambient concentrations exceed State and/or federal standards are termed "CO hotspots." The potential for the project to cause or contribute to the formation of off-site CO hotspots was evaluated based on prior dispersion modeling of the four busiest intersections in the Air Basin that the SCAQMD conducted for its CO Attainment Demonstration Plan in the AQMP. The analysis compares the intersections with the greatest peak-hour traffic volumes that would be impacted by the project to the intersections modeled by the SCAQMD. Project-impacted intersections with peak-hour traffic volumes that would be lower than the intersections modeled by the SCAQMD, in conjunction with lower background CO levels, would result in lower overall CO concentrations as compared to the SCAQMD-modeled values to maintain attainment status in its AQMP.

Toxic Air Contaminant Impacts

Interstate 5 Freeway

According to CARB guidance, mobile sources of emissions on freeways generate carcinogenic toxic air contaminants (TACs) that constitute the majority of the known health risk from motor vehicle traffic (CARB 2005). These TACs include DPM emitted from diesel-fueled trucks, and benzene and 1,3-butadiene from emitted from gasoline-fueled passenger vehicles. TAC exposure and health risk drops substantially within the first 300 feet from a freeway and generally recommends avoiding the siting of 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. The guidance also recognizes that local planning agencies have a responsibility to balance other considerations, including housing and transportation needs, economic development priorities and other quality of life issues and to consider site-specific project design features that reduce air pollution exposures. In addition, the guidance recognizes that health risks from mobile sources, in particular DPM, would decrease over time as cleaner technology phases in.

The project site is located between Wiley Canyon Road and the I-5 freeway, south of Wabuska Street and north of Calgrove Boulevard. The western portion of the project site towards the I-5 freeway would be developed with townhomes with enhanced elevations and no windows or decks facing the freeway. The closest lane of traffic on the I-5 freeway would be approximately 66 feet to 115 feet from the project site property line where development would occur. Due to the proximity of the project site to the I-5 freeway an assessment of air quality impacts to the future project occupants from emissions generated by vehicles and trucks traveling on the I-5 freeway were evaluated. Detailed parameters and calculations for the I-5 freeway Health Risk Assessment (HRA) are provided in Appendix B of this EIR.

Project

The greatest potential for TAC emissions during construction of the project would be related to DPM emissions associated with heavy-duty equipment during excavation and grading activities. Construction activities associated with the project would be sporadic, transitory, and short-term in nature (approximately 36 months). To assess potential health risk impacts (cancer, or other acute or chronic conditions) related to TACs exposure from airborne emissions during project construction, a quantitative HRA was prepared. The HRA evaluated the potential for increased health risks for off-site sensitive receptors due to the project construction activities. Detailed parameters and calculations for the project HRA are provided Appendix B of this EIR.

The construction HRA was performed in accordance with the revised OEHHA *Air Toxics Hot Spots Program Guidance Manual for Preparation of Health Risk Assessments* (OEHHA Guidance) (OEHHA, 2015). The analysis incorporated the estimated construction emissions and dispersion modeling using the USEPA AMS/EPA Regulatory Model (AERMOD) model with meteorological data from the closest SCAQMD meteorological monitoring station.

For this risk assessment, AERMOD dispersion model output was converted into specific cancer risks and non-cancer chronic health hazard impacts. Health impacts addressed construction DPM emissions and the effects on nearby sensitive uses (residential and school). Consistent with OEHHA methodology, health impact calculations take into account higher estimates of cancer potency during early life exposures and to use different assumptions for breathing rates and length of residential exposures (OEHHA, 2015).

During long-term operations of the project, TACs could be emitted as part of periodic maintenance operations, routine cleaning, periodic painting, etc., and from periodic visits from delivery trucks and service vehicles. However, these events are expected to be occasional and result in minimal emissions exposure to off-site sensitive receptors. As the project consists of residential uses, commercial uses, and natural and improved open space uses, the project would not include sources of substantial TAC emissions identified by the SCAQMD or CARB siting recommendations (SCAQMD 2005, CARB 2005). Thus, a qualitative analysis is appropriate for assessing the project's operational emissions.

Cumulative Impacts

As discussed in the project traffic study (Appendix K), there are four related projects identified in the vicinity of the project. The nearest related project is the Warner/Ranch Lyons Canyon project located approximately 350 feet east of the project site. The next closest related project is the Valley Street Condos located approximately 1.10 miles northeast of the project site.

The SCAQMD CEQA Air Quality Handbook states that the "Handbook is intended to provide local governments, project proponents, and consultants who prepare environmental documents with guidance for analyzing and mitigating air quality impacts of projects (SCAQMD 1993a)." The SCAQMD CEQA Air Quality Handbook also states that "[f]rom an air quality perspective, the impact of a project is determined by examining the types and levels of emissions generated by the project and its impact on factors that affect air quality. Projects should be evaluated in terms of air pollution thresholds established by the District (SCAQMD 1993a)." The SCAQMD also provided guidance on an acceptable approach to addressing the cumulative impacts issue for air quality as discussed below (SCAQMD 2003a):

As Lead Agency, the AQMD uses the same significance thresholds for project specific and cumulative impacts for all environmental topics analyzed in an Environmental Assessment or EIR...

Projects that exceed the Project-specific significance thresholds are considered by the SCAQMD to be cumulatively considerable. This is the reason project-specific and cumulative significance thresholds are the same. Conversely, projects that do not exceed the project-specific thresholds are generally not considered to be cumulatively significant.

Therefore, consistent with accepted and established SCAQMD cumulative impact evaluation methodologies, the potential for the project to result in cumulative impacts from regional emissions is assessed based on the SCAQMD thresholds.

4.2.5 Impact Analysis

Threshold AQ-1: Would the project conflict with or obstruct implementation of the applicable air quality plan?

SCAQMD CEQA Air Quality Handbook Policy Analysis

The following analysis addresses the project's consistency with applicable SCAQMD and SCAG policies, inclusive of regulatory compliance. In accordance with SCAQMD's CEQA Air Quality Handbook, Chapter 12, the following criteria are required to be addressed to determine the project's consistency with applicable SCAQMD and SCAG policies:

Criterion 1: Will the project result in any of the following:

- An increase in the frequency or severity of existing air quality violations; or
- Cause or contribute to new air quality violations; or
- Delay timely attainment of air quality standards or the interim emission reductions specified in the AOMP.

Criterion 2: Will the project exceed the assumptions utilized in preparing the AQMP.

The project's potential impacts with respect to these criteria are discussed to assess the consistency with the SCAQMD's 2016 AQMP and the applicable City General Plan Conservation and Open Space Element plans and policies.

Criterion 1

With respect to the first criterion, localized concentrations of NO_2 as NO_X , CO, PM_{10} , and $PM_{2.5}$ have been analyzed for the project. SO_2 emissions would be negligible during construction and long-term operations and, therefore, would not have the potential to cause or effect a violation of the SO_2 ambient air quality standard. Since VOCs are not a criteria pollutant, there is no ambient standard or localized threshold for VOCs. However, due to the role VOCs play in O_3 formation, it is classified as a precursor pollutant, and only a regional emissions threshold has been established.

The project's criteria air pollutant emissions during construction and operations were analyzed: (1) to ascertain potential effects on localized concentrations; and (2) to determine if there is a potential for emissions to cause or effect a violation of the ambient air quality standards. As shown in Table 4.2-8 and Table 2.2-9, localized construction and operational emissions are below the localized significance thresholds for all pollutants. Therefore, emissions would not exceed the SCAQMD-recommended localized significance thresholds at sensitive receptors in proximity to the project site.

The project would not introduce any substantial stationary sources of emissions; therefore, CO is the appropriate benchmark pollutant for assessing local area air quality impacts from post-construction motor vehicle operations (SCAQMD 1993a). As indicated below, no intersections would result in a CO hotspot in excess of the ambient air quality standards, and impacts would be less than significant. Accordingly, the project would not increase the frequency or severity of an existing CO violation or cause or contribute to new CO violations.

Therefore, in response to Criterion 1, the project would not increase the frequency or severity of an existing violation or cause or contribute to new violations for ozone and impacts regarding the timely attainment of air quality standards or interim emission reductions specified in the AQMP would be **less than significant**; no mitigation is required.

Criterion 2

With respect to the second criterion for determining consistency with AQMP growth assumptions, the projections in the AQMP for achieving air quality goals are based on assumptions in SCAG's 2016-2040 RTP/SCS regarding population, housing, and growth trends. Determining whether or not a project exceeds the assumptions reflected in the AQMP involves the evaluation of consistency with applicable population, housing, and employment growth projections and appropriate incorporation of AQMP control measures. The following discussion provides an analysis with respect to these measures.

As discussed above, the SCAQMD has adopted a series of AQMPs to lead the Air Basin into compliance with several criteria pollutant standards and other federal requirements. The 2016 AQMP relied on emissions forecasts based on the demographic and economic growth projections provided by SCAG's 2016-2040 RTP/SCS in devising its control strategies for reducing emissions of ozone and PM2.5 to meet five NAAQS (SCAQMD 2017a). SCAG is charged by California law to prepare and approve "the portions of each AQMP relating to demographic projections and integrated regional land use, housing, employment, and transportation programs, measures and strategies (SCAQMD 2017a)." The SCAQMD recommends that, when determining whether a project is consistent with the current AQMP, the lead agency assess whether the project would directly obstruct implementation of the plan by impeding the SCAQMD's efforts to achieve attainment with respect to any criteria pollutant for which it is currently not in attainment of the NAAQS and CAAQS (e.g., ozone, PM₁₀, and PM_{2.5}) and whether it is consistent with the demographic and economic assumptions (typically land use related, such as employment and population/residential units) upon which the plan is based (SCAQMD 1993a). Projects whose growth is included in the projections used in the formulation of the AQMP are considered to be consistent with the plan and not to interfere with its attainment (SCAQMD 1993a).

The project would not obstruct implementation of the 2016 AQMP for, as discussed below, its construction and operational emissions would be less than significant. The project would comply with applicable required fleet rules and control strategies to reduce on-road truck emissions (e.g., 13 CCR Section 2025 [CARB Truck and Bus regulation]), and other applicable SCAQMD rules specified and incorporated in the 2016 AQMP. As discussed under Methodology, projects, uses, and activities that are consistent with the applicable growth projections and control strategies used in the development of the AQMP would not jeopardize attainment of the air quality levels identified in the AQMP. As discussed below, compliance with the applicable required fleet rules and control strategies and requirements would render it consistent with, and meet or exceed, the AQMP requirements for control strategies intended to reduce emissions from construction equipment and activities. Thus, the project's criteria pollutant emissions would not cause the Air Basin's air quality to worsen so as to impede the SCAQMD's efforts to achieve attainment with respect to any criteria pollutant for which it is currently not in attainment of the NAAQS and CAAQS

(e.g., ozone, PM_{10} , and $PM_{2.5}$),⁴ or to cause the Air Basin to deteriorate from its current attainment status with respect to any other criteria pollutant emissions.

As further discussed below, the project would also be affirmatively consistent with applicable 2016 AQMP control strategies. The project incorporates into its design appropriate control strategies set forth in the 2016 AQMP for achieving its emission reduction goals and would be consistent with the demographic and economic assumptions upon which the plan is based.

Construction

Control Strategies

During its construction, the project must comply with CARB's requirements to minimize short-term emissions from on-road and off-road diesel equipment, and with SCAQMD's regulations such as Rule 403 for controlling fugitive dust and Rule 1113 for controlling VOC emissions from architectural coatings. Furthermore, the project would utilize construction contractors in compliance with California's on-road and off-road vehicle rules, including the ATCM that limits heavy-duty diesel motor vehicle idling to five minutes at any location (13 CCR Section 2485), the Truck and Bus regulation that reduces NOx, PM₁₀, and PM_{2.5} emissions from existing diesel vehicles operating in California (13 CCR Section 2025) and the In-Use Off-Road Diesel Fueled Fleets regulation that reduces emissions by the installation of diesel soot filters and encouraging the retirement, replacement, or repower of older, dirtier engines with newer emission controlled models (13 CCR Section 2449). The project's construction contractor would be required to comply with these regulatory control measures. Compliance with these regulatory control measures would ensure the project would not conflict with AQMP control strategies, such as the NO_X and PM₁₀/PM_{2.5} reduction measures MOB-08 (Accelerated Retirement of Older On-Road Heavy-Duty Vehicles) and MOB-10 (Extension of the Surplus Off-Road Opt-In for NO_X Provision for Construction/Industrial Equipment) in the 2016 AQMP, intended to reduce emissions from construction equipment and activities.

Growth Projections

The project would generate short-term construction jobs, but these jobs would not necessarily bring new construction workers or their families into the region, since construction workers are typically drawn from an existing regional pool who travel among construction sites within the region. Construction workers are not typically brought from other regions to work on developments such as the project. Moreover, these jobs would be relatively small in number and temporary in nature. Therefore, the project's construction jobs would not conflict with the long-term employment or population projections upon which the 2016 AQMP is based.

Operation

Control Strategies and Policy Consistency

The 2016 AQMP was prepared to accommodate growth, reduce the levels of pollutants within the areas under the jurisdiction of SCAQMD, return clean air to the region, and minimize the impact on the economy. Projects that are

The Los Angeles County portion of the Air Basin is designated as nonattainment for the federal lead standard; however, this was due to localized emissions from two lead-acid battery recycling facilities in the City of Vernon and the City of Industry that are no longer operating. For reference see South Coast Air Quality Management District, Board Meeting, Agenda No. 30, Adopt the 2012 Lead State Implementation Plan for Los Angeles County, May 4, 2012.

considered consistent with the AQMP would not interfere with attainment because this growth is included in the projections used in the formulation of the AQMP.

The project design and land uses render it consistent with the 2016 AQMP during operations. As discussed above, the 2016 AQMP includes transportation control strategies from the 2016-2040 RTP/SCS that are intended to reduce vehicle miles traveled (VMT) and resulting regional mobile source emissions. The majority of these strategies are to be implemented by cities, counties, and other regional agencies such as SCAG and SCAQMD, although some can be furthered by individual development projects.

The project location would support land use and transportation control strategies related to reducing vehicle trips for patrons and employees by co-locating residential and commercial uses and by increasing commercial density near public transit. In addition, as described in the traffic analysis, the project would provide a Class I bicycle trail from the project site south on to Calgrove Boulevard which would connect cyclists at the project site to other parts of the City with existing bicycle infrastructure (Stantec 2022). Existing bicycle facilities include an existing Class II bike lane on Calgrove Boulevard east of Wiley Canyon Road and on Wiley Canyon Road north of Lyons Avenue. Bicycle parking and alternative fueled vehicle spaces would be provided at the project site, consistent with Title 24 Building Energy Efficiency Standards and CALGreen Code. The project site additionally has access to four existing local Santa Clarita Transit routes: Line 4, Line 5, Line 6, and Line 14. Additionally, the Newhall Metrolink station is located approximately 2.5 miles northeast, and the McBean Regional Transit Center is located approximately three miles from the project site. Thus, the project would result in reduced VMT, and reduced associated transportation-related air pollutant emissions, as compared to the statewide and Air Basin averages. This analysis provides evidence of the project's consistency with the 2016 AQMP's goal of reducing mobile source emissions as a source of NO_X and PM_{2.5}.

Growth Projections

The project is designated as Mixed-Use Overlay zoning and is anticipated to be fully operational in 2025. The project's growth would also be consistent with the growth projections contained in the 2016-2040 RTP/SCS. The project consists of 379 multifamily residential units and a 217 unit senior living facility and would add approximately 1,166 people to the City's jurisdiction, that would comprise approximately 1.9 percent and 2.6 percent of SCAG's projected year 2040 estimated increase of 60,200 in population and 23,000 households, respectively (Stantec 2022, SCAG 2020a). In addition, the project would add approximately 207 employees that would comprise approximately 0.9 percent of SCAG's estimated 2040 employment increase of 22,400(Stantec 2022, SCAG 2020a). The project would have a very small effect on the overall population and household projections for the City and not cause an exceedance of SCAG employment growth projections. Therefore, the increases in employment would be consistent with SCAG's 2016-2040 RTP/SCS goals and would be consistent with the growth projections contained in SCAG's 2016-2040 RTP/SCS, which form the basis of the growth projections in the 2016 AQMP. As such, impacts would be **less than significant**, and no mitigation is required.

Threshold AQ-2: Would the project result in a cumulatively considerable new increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?

The project would contribute to local and regional air pollutant emissions during construction (short-term or temporary) and occupancy (long-term).

Construction

Construction of the project has the potential to generate temporary regional criteria pollutant emissions through the use of heavy-duty construction equipment, such as excavators and cranes, through vehicle trips generated by workers and haul trucks traveling to and from the project site, and through building activities such as the application of paint and other surface coatings. In addition, fugitive dust emissions would result from demolition and various soil-handling activities. Mobile source emissions, primarily NO_X and DPM, would result from the use of construction equipment such as dozers and loaders. Construction emissions can vary substantially from day to day, depending on the level of activity, the specific type of construction activity, and prevailing weather conditions.

The maximum daily construction emissions for the project were estimated for each construction year. The maximum daily emissions are predicted values for a representative worst-case day, and do not represent the actual emissions that would occur for every day of construction, which would likely be lower on many days. As stated above, in order to provide a conservative emissions analysis, for modeling purposes, construction emissions were modeled beginning in 2023. Detailed emissions calculations are provided in Appendix B of this EIR.

The results of the criteria pollutant calculations are presented in Table 4.2-6, Estimated Maximum Regional Construction Emissions, and include dust control measures required to be implemented by SCAQMD Rule 403 (Control of Fugitive Dust) and from architectural coating emission factors based on SCAQMD Rule 1113 (Architectural Coatings). As shown in Table 4.2-6, construction-related daily emissions would exceed the SCAQMD thresholds of significance for NO_X emissions. Therefore, the project's temporary impact related to regional NO_X construction emissions would be **potentially significant**, and mitigation would be required.

Table 4.2-6. Estimated Maximum Regional Construction Emissions (pounds per day)^a

Phase and Year	voc	NOx	СО	SO ₂	PM ₁₀ b	PM _{2.5} b
Demolition - 2023	3	28	35	<1	2	1
Site Preparation - 2023	3	24	24	<1	2	1
Grading – 2023°	8	91	69	<1	7	5
Drainage/Utilities/Sub-grade - 2023	4	34	41	<1	2	2
Drainage/Utilities/Sub-grade - 2024	4	32	42	<1	2	1
Foundations/Concrete Pour - 2024	3	27	32	<1	4	3
Building Construction - 2024	3	29	38	<1	2	1
Building Construction - 2025	3	27	37	<1	1	1
Architectural Coating - 2025	38	11	16	<1	1	1
Pavcing - 2025	2	22	28	<1	1	1
Overlapping Phases						
Grading - 2023 and Drainage/Utilities/Sub- Grade - 2023	12	126	110	<1	9	6
Building Construction - 2025 and Architectural Coating and Paving - 2025	43	61	81	<1	3	2
Maximum Daily Emissions	43	126	110	<1	9	6
SCAQMD Numeric Indicators	75	100	550	150	150	55
Exceeds Thresholds?	No	Yes	No	No	No	No

Source: ESA, 2023.

Notes:

Totals may not add up exactly due to rounding in the modeling calculations. Detailed emissions calculations are provided in Exhibit B of this technical report.

- b Emissions include fugitive dust control measures consistent with SCAQMD Rule 403.
- ^c Emissions were calculated to account for the additional haul trucks associated with the additional 23,000 cy of imported soil.

Operation

The project is expected to produce minimal amounts of mobile, stationary, and area source operational regional criteria pollutant emissions. Operational emission estimates include compliance with SCAQMD Rule 1113 (Architectural Coatings), which limits the VOC content of architectural coatings. Detailed emissions calculations are provided in Appendix B of this EIR.

Daily trip generation rates for the project were provided in the Stantec traffic analysis, included as Appendix K to this EIR (Stantec 2022). The VMTs were calculated based on the provided 21.86 VMT per capita and 17.81 VMT per employee. The traffic report estimated an increase of population of 1,166 population and 207 employees to give a total of 24,147 VMT generated for the project.

Natural gas usage factors are based on recreational and retail data from the California Energy Commission, and landscape equipment emissions are based on off-road emission factors from CARB. Emissions from the use of consumer products and the reapplication of architectural coatings are based on data provided in CalEEMod.

The results of the regional criteria pollutant emission calculations for VOC, NO_X, CO, SO₂, PM10, and PM2.5 are presented in Table 4.2-7, Estimated Maximum Regional Operational Emissions. The project's full buildout maximum regional emissions from operational activities in year 2025 would be below the regional numeric indicators. Therefore, the project's impact related to operational emissions would be **less than significant**, and no mitigation is required.

Table 4.2-7. Estimated Maximum Operational Emissions (pounds per day)^a

Source	VOC	NOx	CO	SO ₂	PM ₁₀	PM _{2.5}
Proposed Project						
Area (Coating, Consumer Products, Landscaping)	16	1	49	<1	<1	<1
Energy	<1	2	1	<1	<1	<1
Mobile	9	13	85	<1	6	1
Total Project	25	15	135	<1	6	2
SCAQMD Numeric Indicators	55	55	550	150	150	55
Exceeds Thresholds?	No	No	No	No	No	No

Source: ESA, 2023. Notes:

Threshold AQ-3: Would the project expose sensitive receptors to substantial pollutant concentrations?

Localized Construction Emissions

As explained above, the localized construction air quality analysis was conducted using the methodology prescribed in the SCAQMD *Final Localized Significance Threshold Methodology* (June 2003, revised July 2008) (SCAQMD 2008a). The screening criteria provided in the *Final Localized Significance Threshold Methodology* were used to determine localized construction emissions thresholds for the project. The maximum daily localized emissions for each of the construction phases and the localized significance thresholds are presented in Table 4.2-8, Estimated Maximum Localized Construction Emissions. The same phasing, equipment assumptions, and compliance with

^a Totals may not add up exactly due to rounding in the modeling calculations. Detailed emissions calculations are provided in Exhibit B of this technical report.

SCAQMD Rule 403 and Rule 1113, were used as for the regional emissions calculations discussed above. As shown in Table 4.2-8, construction-related localized emissions would not exceed the SCAQMD localized significance thresholds for NOx, CO, PM_{10} and $PM_{2.5}$. Therefore, the project's temporary impact related to localized construction emissions would be **less than significant**, and no mitigation is required.

Localized Operational Emissions

The localized operational air quality analysis was conducted using the methodology prescribed in the SCAQMD Localized Significance Threshold Methodology (June 2003, revised July 2008). The screening criteria provided in the Localized Significance Threshold Methodology were used to determine the localized operational emissions numerical indicators of significance for the project. The same assumptions, including compliance with the Title 24 building energy efficiency standards and CALGreen Code were used in the analysis. The maximum daily localized emissions and the localized significance thresholds are presented in Table 4.2-9, Estimated Maximum Localized Operational Emissions. As shown in Table 4.2-9, operational emissions of full project buildout would not exceed the SCAQMD localized significance thresholds for NO_X, CO, PM₁₀ and PM_{2.5}. Therefore, the project's temporary impact related to localized operational emissions would be **less than significant**, and no mitigation is required.

Table 4.2-8. Estimated Maximum Localized Construction Emissions (pounds per day)^a

Phase	NOx	СО	PM ₁₀ b	PM _{2.5} b
Demolition - 2023	27	34	2	1
Site Preparation - 2023	24	23	1	1
Grading - 2023	80	59	6	4
Drainage/Utilities/Sub-grade - 2023	33	39	2	1
Drainage/Utilities/Sub-grade - 2024	31	39	1	1
Foundations/Concrete Pour - 2024	26	28	4	3
Building Construction - 2024	25	31	1	1
Building Construction - 2025	23	31	1	1
Architectural Coating - 2025	11	15	1	1
Paving - 2025	18	24	1	1
Overlapping Phases				
Grading - 2023 and Drainage/Utilities/Sub-Grade - 2023	113	99	8	5.8
Building Construction - 2025 and Architectural Coating and Paving - 2025	52	69	2	2
Maximum Localized (On-Site) Emissions	113	99	8	5.8
SCAQMD Screening Numeric Indicator °	246	1,644	12	6
Exceed Screening Numeric Indicator?	No	No	No	No

Source: ESA, 2023.

Notes:

^a Totals may not add up exactly due to rounding in the modeling calculations. Detailed emissions calculations are provided in Exhibit B of this technical report.

b Emissions include fugitive dust control measures consistent with SCAQMD Rule 403.

The SCAQMD LSTs are based on Source Receptor Area 13 (Santa Clarita Valley) for a 5-acre site with sensitive receptors conservatively assumed to be located adjacent to the construction area.

Table 4.2-9. Estimated Maximum Localized Operational Emissions (pounds per day)^a

Source	NOx	CO	PM ₁₀	PM _{2.5}
Area (Consumer Products, Landscaping)	1	49	<1	<1
Energy	2	1	<1	<1
Total Localized (On-Site) Emissions	3	50	<1	<1
SCAQMD Screening Numeric Indicator b	246	1,644	3	2
Exceeds Screening Numeric Indicator?	No	No	No	No

Source: ESA, 2023.

Notes:

Carbon Monoxide Hotspots

The potential for the project to cause or contribute to CO hotspots was evaluated by comparing project intersections (both intersection geometry and traffic volumes) with prior studies conducted by the SCAQMD in support of their AQMPs and considering existing background CO concentrations. As discussed below, this comparison demonstrates that the project would not cause or contribute considerably to the formation of CO hotspots, that CO concentrations at project-impacted intersections would remain well below the threshold 1-hour and 8-hour CAAQS of 20 or 9.0 ppm, respectively within one-quarter mile of a sensitive receptor, and that no further CO analysis is warranted or required.

Table 4.2-1 shows that CO levels in the project vicinity are substantially below the Federal and the State standards. Maximum CO levels in recent years were 1.2 ppm (1-hour average) and 0.8 ppm (8-hour average) as compared to the criteria of 20 ppm (CAAQS 1-hour average) or 35 ppm (NAAQS 1-hour average) and 9.0 ppm (8-hour average). No exceedances of the CO standards have been recorded at monitoring stations in the Air Basin for some time, and the Air Basin is currently designated as a CO attainment area for both the CAAOS and the NAAOS.

The SCAQMD conducted CO modeling for the 2003 AQMP for the four worst-case intersections in the Air Basin. These include: (a) Wilshire Boulevard and Veteran Avenue; (b) Sunset Boulevard and Highland Avenue; (c) La Cienega Boulevard and Century Boulevard; and (d) Long Beach Boulevard and Imperial Highway. In the 2003 AQMP CO attainment demonstration, the SCAQMD notes that the intersection of Wilshire Boulevard and Veteran Avenue is the most congested intersection in Los Angeles County, with an average daily traffic volume of about 100,000 vehicles per day (SCAQMD 2003b). Relevant information from the 2003 AQMP CO attainment demonstration relied upon in this assessment is provided in Appendix B of this EIR. This intersection is located near the on- and offramps to Interstate 405 in West Los Angeles. The data provided in Table 4-2-9 of Appendix V of the 2003 AQMP show that the peak modeled CO concentration due to vehicle emissions (i.e., excluding background concentrations) at these four intersections was 4.6 ppm (1-hour average) and 3.2 ppm (8-hour average) at Wilshire Boulevard and Veteran Avenue. Therefore, projects that result in traffic at any intersection of less than 100,000 vehicles per day would be considered to be less than significant.

Based on the project traffic analysis (Stantec 2022), the project would have a maximum traffic volume of approximately 4,196 average daily trips (ADT) under the project buildout scenario. As the project does not result in 100,000 vehicles per day, this comparison demonstrates that the project would not contribute to the formation of CO hotspots and that no further CO analysis is required. The project would not contribute to the formation of CO

^a Totals may not add up exactly due to rounding in the modeling calculations. Detailed emissions calculations are provided in Exhibit B of this technical report.

The SCAQMD LSTs are based on Source Receptor Area 13 (Santa Clarita Valley) for a 5-acre site with sensitive receptors conservatively assumed to be located adjacent to the Project Site.

⁵ The eight-hour average is based on a 0.7 persistence factor, as recommended by the SCAQMD.

hotspots and no further CO analysis is required. Therefore, the project would result in **less than significant** impacts with respect to CO hotspots. No mitigation is required.

Toxic Air Contaminants

Construction

Temporary TAC emissions associated with DPM emissions from heavy construction equipment would occur during construction activities. According to the OEHHA and the SCAQMD's Health Risk Assessment Guidance for Analyzing Cancer Risks from Mobile Source Diesel Idling Emissions for CEQA Air Quality Analysis (August 2003), health effects from TACs are described in terms of individual cancer risk based on a lifetime (i.e., 70-year) resident exposure duration. Given the temporary and short-term construction schedule (36 months), the project would not result in a long-term (i.e., lifetime or 70-year) exposure as a result of construction activities. The project's health risk calculations were performed using a spreadsheet tool consistent with the OEHHA guidance, which incorporates the algorithms, equations, and variables described above as well as in the OEHHA guidance, and incorporates the results of the AERMOD dispersion model. Results of the HRA are shown in Table 4.2-10, Maximum Health Risk Impacts for Off-Site Sensitive Receptors.

Table 4.2-10. Maximum Unmitigated Health Risk Impacts for Off-site Sensitive Receptors ^{a,b}

Sensitive Receptor	Maximum Cancer Risk (# in one million)	Hazard Index
Residential Land Use	55.1	0.14
Maximum Individual Cancer Risk Threshold	10	1.0
Exceeds Threshold?	Yes	No

Source: ESA, 2023.

The location of the maximum unmitigated cancer risk is at the sensitive receptors to the immediate north of the project site.

- The location of the maximum unmitigated cancer risk is at the sensitive receptors to the immediate north of the project site.
- b The cancer risk was calculated to account for the additional haul trucks associated with the additional 23,000 cy of imported soil.

As shown in Table 4.2-10, the residential cancer risk exceed the SCAQMD significance threshold of 10 per million; therefore, this impact is **potentially significant**, and mitigation measures would be required. Hazard index values for all receptor types were below the SCAQMD significance threshold of 1.0, therefore, chronic impacts would be less than significant. The residential lifetime exposure under OEHHA guidelines takes into account early life (infant and children) exposure. The calculated cancer risk assumes sensitive receptors would not have any mitigation, such as mechanical filtration, and exposure would occur with windows open.

Operation

The SCAQMD recommends that operational health risk assessments be conducted for substantial sources of operational DPM (e.g., truck stops and warehouse distribution facilities that generate more than 100 trucks per day or more than 40 trucks with operating transport refrigeration units) and has provided guidance for analyzing mobile source diesel emissions (SCAQMD 2003c). Project operations would generate only minor amounts of diesel emissions from mobile sources, such as delivery trucks and occasional maintenance activities that would not exceed 100 trucks per day or more than 40 trucks with operating transport refrigeration units. Furthermore, project trucks would be required to comply with the applicable provisions of the CARB (13 CCR Section 2025 [Truck and

Bus regulations]) to minimize and reduce PM and NO_X emissions from existing diesel trucks. Therefore, project operations would not be considered a substantial source of diesel particulates.

In addition, project operations would only result in minimal emissions of TACs from maintenance or other ongoing activities, such as from the use of architectural coatings and other products. There are no anticipated stationary sources of TACs. With respect to the use of consumer products and architectural coatings, the retail and residential uses associated with the project would be expected to generate minimal emissions from these sources. The project's land uses would not include installation of industrial-sized paint booths or require extensive use of commercial or household cleaning products. As a result, toxic or carcinogenic air pollutants are not expected to occur in any substantial amounts in conjunction with operation of the proposed land uses within the project site. Based on the uses expected on the project site, potential long-term operational impacts associated with the release of TACs would be minimal, regulated, and controlled, and would not be expected to exceed the SCAQMD numerical indicator of significance. Therefore, operational impacts would be less than significant. Thus, operation of the project would not expose sensitive receptors to substantial toxic air contaminant concentrations and impacts would be less than significant, and no mitigation is required.

Freeway Health Risk Assessment

Freeways and high-traffic roads are significant sources of TAC emissions. CARB recommends siting sensitive land uses at least 500 feet away from such sources. As the proposed project would develop residential areas near the I-5 freeway, a HRA was conducted to disclose the potential risk to future occupants of the proposed project. The closest lane of traffic on the I-5 freeway would be approximately 66 feet to 115 feet from the project site property line where development would occur. The townhomes along the project site's western boundary would have an additional buffer distance ranging from approximately 5 feet to 24 feet from the property line. Details of the modeling and assumptions are included in Appendix B of this EIR.

Gasoline and diesel-fueled cars and trucks are a source of MSATs that pose potential carcinogenic and non-carcinogenic health risks to exposed populations. The freeway HRA focused on the emissions of the following carcinogenic priority MSATs: DPM, acetaldehyde, acrolein, benzene, 1,3-butadiene, formaldehyde, and naphthalene.

The analysis incorporated traffic volumes and speeds for the I-5 freeway and ramps in the project vicinity obtained from the California Department of Transportation monitoring data. Following OEHHA Guidance (2015), the HRA assesses a 30-year residential exposure with age-specific sensitivities to account for early life exposure. The analysis spans 30 years from project buildout, defined by the period immediately following the earliest anticipated project completion. This represents the worst-case long-term exposure from the freeway sources as future vehicles implement cleaner technologies (natural gas, hybrid and electric vehicles) moving away from a dependence on diesel and gasoline fossil fuels.

The HRA analysis conservatively modeled all trucks as diesel heavy-heavy duty trucks (HHDT) and the balance of the traffic as gasoline-fueled light-duty passenger vehicles (gasoline cars). Air toxic emissions from the diesel HHDT were characterized by the exhaust emissions of DPM (using PM_{10} exhaust as a surrogate for whole Diesel Exhaust representing both plus the toxic particulate and gaseous components of the exhaust). Gasoline passenger (car) vehicle emissions were characterized by total organic gaseous exhaust (TOG) also speciated for the five carcinogenic MSATs: acetaldehyde, benzene, 1,3-butadiene, formaldehyde, and naphthalene.

Table 4.2-11 shows the maximum predicted cancer risk from MSAT emissions from adjacent I-5 freeway traffic for residential receptors in the project development area.

Table 4.2-11. Maximum Cancer Risk Impacts for On-site Residential Receptors

Freeway Sources	Maximum Cancer Risk (# in one million)	Maximum Cancer Risk (# in a Million) with MERV-13
Trucks	18.2	7.3
Cars	0.1	0.1
Total Estimated Cancer Risk	18.3	7.4
Max Individual Cancer Risk Threshold	10	10
Exceeds Threshold?	Yes	No

Source: ESA 2022

The maximum calculated cancer risk of 18.3 in million is estimated for outdoor exposure and assumes that sensitive receptors (residential uses) would have continuously open windows. The California Title 24 standards requires the installation of filters that meet the Minimum Efficiency Reporting Value (MERV) of 13, which typically results in a reduction of up to 85 percent in DPM (SCAQMD 2008b). There is no abatement or reduction in risk from the organic HAPs from the gaseous exhaust from trucks and passenger vehicles, however DPM is the overwhelming contributor to cancer risk (90 percent). Indoor air filters are only capable of reducing particulate matter when windows and doors are closed, and the HVAC system is functioning. In addition, the filter medium should be regularly replaced as per system specifications. With a conservatively applied 60 percent reduction to health risk impacts, the maximally exposed future resident was determined to be 7.4 in one million after reductions from MERV 13 filters. As the maximum impact would be less than the significance threshold of ten (10) in one million, impacts would be less than significant, and mitigation is not required.

Non-carcinogenic health impacts were determined for the exhaust emissions from trucks and cars from the nearby I-5 freeway traffic also following the OEHHA HRA guidance (OEHHA 2015). TACs for gasoline included the five carcinogenic MSATs (acetaldehyde, benzene, 1,3-butadiene formaldehyde, naphthalene) plus acrolein. Chronic health effects from diesel exhaust were based on diesel PM₁₀ (DPM) as a surrogate and based on chronic respiratory effects. Acute health effects for diesel were analyzed for the impacts of individual toxic components of the particulate and gaseous exhaust phases as outlined in OEHHA guidelines and utilizing ARB speciation profiles. Particulate matter components evaluated for DPM included chlorine, sulfates, and heavy metals.

Acute and chronic non-cancer exposures to gasoline and diesel exhaust air toxics were based on averaging periods of one hour to one year and apply to potential exposures for site workers and visitors, in addition to the project residents. Accordingly, non-cancer health effects were determined for all locations within the project development area including setback areas directly adjacent to the freeway (within 30 meters of the freeway southbound lanes). The analysis showed that potential acute and chronic health impacts are well below established significance thresholds at all locations. The inputs and results for non-carcinogenic health impacts are included along with the cancer HRA in Appendix B of this EIR. As such, impacts would be **less than significant**, and no mitigation is required.

Threshold AQ-4: Would the project result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?

Construction

Potential activities that may emit odors during construction include the use of architectural coatings and solvents, as well as the combustion of diesel fuel in on-and off-road equipment. SCAQMD Rule 1113 would limit the amount of VOCs in architectural coatings and solvents. In addition, the project would comply with the applicable provisions of the CARB Air Toxics Control Measure regarding idling limitations for diesel trucks. DPM poses a carcinogenic health risk that is generally measured using an exposure period of 30 years for sensitive residential receptors, according to the OEHHA Air Toxics Hot Spots Program Guidance Manual for Preparation of Health Risk Assessments, which was updated in 2015 with new exposure parameters including age sensitivity factors. Through mandatory compliance with SCAQMD Rules, no construction activities or materials are expected to create objectionable odors affecting a substantial number of people. Therefore, construction activities would result in **less than significant** impacts with respect to other emissions, including those leading to odors.

Operational

According to the SCAQMD CEQA Air Quality Handbook, land uses associated with odor complaints typically include agricultural uses, wastewater treatment plants, food processing plants, chemical plants, composting, refineries, landfills, dairies, and fiberglass molding. The project does not include any uses identified by the SCAQMD as being associated with substantial odors. As a result, the project is not expected to discharge contaminants into the air in quantities that would cause a nuisance, injury, or annoyance to the public or property pursuant to SCAQMD Rule 402. Therefore, operation of the project would result in **less than significant** impacts with respect to other emissions, including those leading to odors. No mitigation measures are required.

Threshold AQ-5: Would the project exceed the most recent air quality thresholds as determined by the South Coast Air Quality Management District, as published in its "Air Quality Analysis Guidance Handbook"?

This section of the EIR has evaluated the proposed project in compliance with the most recent air quality thresholds, as determined by the SCAQMD. All air quality impacts would be less than significant with the exception of Threshold AQ-3, which is **potentially significant**.

4.2.6 Mitigation Measures

The following mitigation measure (MM) is provided to reduce the impacts from construction equipment.

MM-AQ-1. Construction Equipment Features. The project shall utilize off-road diesel-powered construction equipment that meets or exceeds the California Air Resources Board (CARB) and U.S. Environmental Protection Agency (USEPA) Tier 4 Final off-road emissions standards or equivalent for equipment rated at 50 horsepower (hp) or greater during project construction where available within the Los Angeles region. Such equipment shall be outfitted with Best Available Control Technology (BACT), which means a CARB-certified Level 3 diesel particulate filter (DPF) or equivalent.[COMPLYING WITH THE LAW IS NOT A MITIGATION MEASURE]

4.2.7 Level of Significance After Mitigation

Mitigated Construction Emissions

Construction of the project would result in emissions that exceed the NO_X regional threshold, and, as such, impacts would be potentially significant prior to mitigation. With implementation of MM-AQ-1, NO_X emissions would be reduced to a level below the SCAQMD regional thresholds, as shown in Table 4.2-12, Estimated Maximum Mitigated Regional Construction Emissions. With implementation of MM-AQ-1, which requires Tier 4 Final off-road emissions standards or equivalent for equipment rated at 50 horsepower, NO_X emissions from construction would be reduced to below the regional threshold and impacts related to regional NO_X construction emissions would be **less than significant with mitigation**.

Table 4.2-12. Estimated Maximum Mitigated Regional Construction Emissions (pounds per day) ^a

Phase and Year	voc	NOx	СО	SO ₂	PM ₁₀ b	PM _{2.5} b
Demolition - 2023	1	8	42	<1	1	<1
Site Preparation - 2023	1	5	29	<1	1	<1
Grading – 2023 ^c	2	19	79	<1	4	2
Drainage/Utilities/Sub-grade - 2023	1	7	52	<1	<1	<1
Drainage/Utilities/Sub-grade - 2024	1	7	53	<1	<1	<1
Foundations/Concrete Pour - 2024	1	5	35	<1	3	2
Building Construction - 2024	2	12	39	<1	1	<1
Building Construction - 2025	2	11	39	<1	1	<1
Architectural Coating - 2025	37	1	17	<1	<1	<1
Paving - 2025	1	8	32	<1	<1	<1
Overlapping Phases						
Grading - 2023 and Drainage/Utilities/Sub- Grade - 2023	3	26	131	<1	4	2
Building Construction - 2025 and Architectural Coating and Paving - 2025	39	21	88	<1	1	1
Maximum Daily Emissions	39	21	126	<1	4	2
SCAQMD Numeric Indicators	75	100	550	150	150	55
Exceeds Thresholds?	No	No	No	No	No	No

Source: ESA, 2023.

Notes:

Mitigated Project Toxic Air Contaminant Emissions

As shown in Table 4.2-13, Maximum Health Risk Impacts for Off-Site Sensitive Receptors, with implementation of MM-AQ-1, which requires Tier 4 Final off-road emissions standards or equivalent for equipment rated at 50 horsepower, the maximum cancer risk and hazard index for residences would be below the SCAQMD significance thresholds. Therefore, impacts related to health risks would be **less than significant with mitigation**.

^a Totals may not add up exactly due to rounding in the modeling calculations. Detailed emissions calculations are provided in Exhibit B of this technical report.

b Emissions include fugitive dust control measures consistent with SCAQMD Rule 403.

^c Emissions were calculated to account for the additional haul trucks associated with the additional 23,000 cy of imported soil.

Table 4.2-13. Maximum Mitigated Health Risk Impacts for Off-site Sensitive Receptors^{a,b}

Sensitive Receptor	Maximum Risk (# in one million)	Hazard Index
Residential Land Use	7.1	0.02
Maximum Individual Cancer Risk Threshold	10	1.0
Exceeds Threshold?	No	No

Source: ESA, 2023.

The location of the maximum mitigated cancer risk is at the sensitive receptors to the immediate north of the project site.

- a The location of the maximum unmitigated cancer risk is at the sensitive receptors to the immediate north of the project site.
- b The cancer risk was calculated to account for the additional haul trucks associated with the additional 23,000 cy of imported soil.

4.2.8 Cumulative Effects

Related projects located in the project vicinity that have not yet been built or that are currently under construction have the potential to cumulatively impact air quality in the Air Basin. Since both the timing and the sequencing of the construction of the related projects are unknown, any quantitative analysis to ascertain daily construction emissions that assumes multiple, concurrent construction projects would be speculative. For this reason, the SCAQMD's recommended methodology for assessing a project's cumulative impacts differs from the cumulative impacts methodology employed in the analysis of other resource areas. The SCAQMD recommends using two different methodologies: (1) that project-specific air quality impacts be used to determine the project's potential cumulative impacts to regional air quality (SCAQMD 1993b); or (2) that a project's consistency with the current AQMP be used to determine its potential cumulative impacts.

Project-Specific Impacts

Regional construction, regional operational, localized construction and localized operational emissions would be below the SCAQMD regional and localized significance thresholds with mitigation as identified in Tables 4.2-6 through Table 4.2-13, respectively. Therefore, cumulative impacts related to construction and operational emissions would be less than significant with mitigation.

Consistency with the Air Quality Management Plan

Additionally, the SCAQMD recommends assessing a project's cumulative impacts based on whether the project is consistent with the current AQMP. CEQA Guidelines Section 15064(h)(3) of the provides guidance in determining the significance of cumulative impacts. Specifically, Section 15064(h)(3) states in part that:

"A lead agency may determine that a project's incremental contribution to a cumulative effect is not cumulatively considerable if the project will comply with the requirements in a previously approved plan or mitigation program which provides specific requirements that will avoid or substantially lessen the cumulative problem (e.g., water quality control plan, air quality plan, integrated waste management plan) within the geographic area in which the project is located. Such plans or programs must be specified in law or adopted by the public agency with jurisdiction over the affected resources through a public review process to implement, interpret, or make specific the law enforced or administered by the public agency..."

For purposes of the cumulative air quality analysis with respect to CEQA Guidelines Section 15064(h)(3), the project's cumulative air quality impacts are determined not to be significant based on its consistency with the SCAQMD's adopted 2016 AQMP, as discussed above.

As discussed above, the project construction would incorporate emission reduction strategies, as applicable, consistent with the 2016 AQMP. Construction of the project would comply with SCAQMD Rule 403 requirements and the ATCM to limit heavy duty diesel motor vehicle idling to no more than five minutes at any given time. During its construction phase, the project would ensure compliance with CARB's requirements to minimize short-term emissions from on-road and off-road diesel equipment, SCAQMD's Rule 403 and Rule 1113, fleet rules to reduce on-road truck emissions (i.e., 13 CCR, Section 2025 (CARB Truck and Bus regulation)). Short-term and temporary construction jobs would be within the growth projections contained in the 2016-2040 RTP/SCS upon which the 2016 AQMP was based. Construction would be consistent with the 2016 AQMP, and impacts with respect to AQMP consistency would be less than significant.

The project location would support land use and transportation control strategies related to reducing vehicle trips for patrons and employees by co-locating residential and commercial uses and by increasing commercial density near public transit. In addition, the project would provide an additional Class I trail from the project site which will connect cyclists at the project site to other parts of the City with existing bicycle infrastructure (Stantec 2022). Bicycle parking and alternative fueled vehicle spaces would be provided at the project site consistent with the 2019 Title 24 Building Energy Efficiency Standards and CALGreen Code. The project site has access to four existing local Santa Clarita Transit routes (Line 4, Line 5, Line 6, and Line 14). Additionally, the Newhall Metrolink station is located approximately 2.5 miles northeast and the McBean Regional Transit Center is located approximately 3 miles from the project site. Thus, the project would result in reduced VMT, and reduced associated transportation-related air pollutant emissions, as compared to the statewide and Air Basin averages. This analysis provides evidence of the project's consistency with the 2016 AQMP's goal of reducing mobile source emissions as a source of NO_X and PM_{2.5}. As such, the project would be consistent with and would not conflict with or obstruct implementation of the 2016 AQMP. Therefore, cumulative impacts with respect to AQMP consistency would be less than significant, and no mitigation is required.

4.2.9 References Cited

CARB. 2005. Air Quality and Land Use Handbook: A Community Health Perspective, April 2005.

CARB. 2016. California Ambient Air Quality Standards (CAAQS), last reviewed February 2024

- CARB 2017. News Release CARB establishes next generation of emission controls needed to improve state's air quality. Accessed October 27, 2021. https://ww2.arb.ca.gov/news/carb-establishes-next-generation-emission-controls-needed-improve-states-air-quality. Accessed October 27, 2021.
- CARB. 2020. Executive Order G-20-239 Southern California Association of Governments (SCAG) 2020 Sustainable Communities Strategy CARB Acceptance of GHG Quantification Determination. Accessed October 27, 2021.https://ww2.arb.ca.gov/sites/default/files/2021-02/SCAG%202020% 20SCS%20CARB%20Acceptance%20of%20GHG%20Quantification%20Determination%20Executive%20 Order.pdf.
- CARB. 2021a. California Air Resources Board (CARB), Ozone & Health, Health Effects of Ozone, Accessed December 6, 2021. https://ww2.arb.ca.gov/resources/ozone-and-health.

- CARB. 2021b. Nitrogen Dioxide & Health, Nitrogen Dioxide & Health | California Air Resources Board. Accessed December 6, 2021.
- CARB. 2021c. Carbon Monoxide & Health, https://ww2.arb.ca.gov/resources/carbon-monoxide-and-health. Accessed December 6, 2021.
- CARB. 2021d. Final Regulation Order, Amendments to the California Diesel Fuel Regulations, Amend Section 2281, Title 13, California Code of Regulations, approved July 15, 2004. Rulemaking: July 24, 2003, Final Regulation Order (ca.gov). Accessed December 6, 2021.
- CARB. 2021e. Sulfur Dioxide & Health, https://ww2.arb.ca.gov/resources/sulfur-dioxide-and-health._Accessed December 6, 2021.
- CARB. 2021f. Inhalable Particulate Matter and Health (PM_{2.5} and PM₁₀), https://ww2.arb.ca.gov/resources/inhalable-particulate-matter-and-health. Accessed December 6, 2021.
- CARB. 2021g. Lead & Health, https://ww2.arb.ca.gov/resources/lead-and-health_Accessed December 6, 2021.
- CARB. 2021h. Sulfate & Health, https://ww2.arb.ca.gov/resources/sulfate-and-health. Accessed December 6, 2021.
- CARB. 2021i. Visibility-Reducing Particles and Health, https://ww2.arb.ca.gov/resources/visibility-reducing-particles-and-health_Accessed December 6, 2021.
- CARB. 2021j. General Information About "Hot Spots", https://www.arb.ca.gov/ab2588/general.htm. Accessed December 6, 2021.
- CARB. 2021k. AB 25188 Air Toxics "Hot Spots" Program, https://www.arb.ca.gov/ab2588/ab2588.htm. Accessed December 6, 2021.
- CARB. 2021. The California Almanac of Emissions and Air Quality. Accessed December 6, 2021. https://ww2.arb.ca.gov/our-work/programs/resource-center/technical-assistance/air-quality-and-emissions-data/almanac.
- CARB. 2021m. Overview: Diesel Exhaust & Health. Accessed October 27, 2021. https://ww2.arb.ca.gov/resources/overview-diesel-exhaust-and-health.
- CARB. 2024a. Innovative Clean Transit (ICT) Regulation Fact Sheet. Accessed February 2024. https://ww2.arb.ca.gov/resources/fact-sheets/innovative-clean-transit-ict-regulation-fact-sheet.
- CARB. 2024b. Solid Waste Collection Vehicle Reg. Accessed February 2024. https://ww2.arb.ca.gov/our-work/programs/solid-waste-collection-vehicle-regulation/about.
- CARB. 2024c. Fleet Rule for Public Agencies and Utilities. Accessed February 2024. https://ww2.arb.ca.gov/our-work/programs/fleet-rule-public-agencies-and-utilities.
- CARB. 2024d. In-Use Off-Road Diesel-Fueled Fleets Regulation. Accessed February 2024. https://ww2.arb.ca.gov/our-work/programs/use-road-diesel-fueled-fleets-regulation.

- CARB. 2024e. Advanced Clean Trucks. Accessed February 2024. https://ww2.arb.ca.gov/our-work/programs/advanced-clean-trucks.
- JD Supra. 2020. A First Look at California's Executive Order Banning Fuel-Burning Vehicles and Imposing Other Greenhouse Gas Reducing Restrictions. Accessed February 2024. https://www.jdsupra.com/legalnews/a-first-look-at-california-s-executive-17672/.
- SCAG. 2020a. Southern California Association of Governments (SCAG) 2020-2045 Regional Transportation Plan/Sustainable Communities Strategy (2020-2045 RTP/SCS), Adopted September 3, 2020. Accessed October 27, 2021. https://scag.ca.gov/sites/main/files/file-attachments/0903fconnectsocal-plan_0.pdf?1606001176.
- SCAG. 2020b. 2020-2045 RTP/SCS Public Health Technical Report, September, page 53. Accessed October 27, 2021. https://scag.ca.gov/sites/main/files/file-attachments/0903fconnectsocal_public-health.pdf?1606001755.
- SCAQMD. 1993a. CEQA Air Quality Handbook, November 1993.
- SCAQMD. 1993b. Potential Control Strategies to Address Cumulative Impacts from Air Pollution White Paper, Appendix D, 1993, page D-3. Accessed February 2019. http://www.aqmd.gov/docs/default-source/Agendas/Environmental-Justice/cumulative-impacts-working-group/cumulative-impacts-white-paper-appendix.pdf?sfvrsn=4.
- SCAQMD. 2003a. White Paper on Potential Control Strategies to Address Cumulative Impacts From Air Pollution, Appendix A, page D-3. Accessed October 28, 2021. http://www.aqmd.gov/docs/default-source/Agendas/Environmental-Justice/cumulative-impacts-working-group/cumulative-impacts-white-paper-appendix.pdf?sfvrsn=4.
- SCAQMD. 2003b. AQMP, Appendix V: Modeling and Attainment Demonstrations, page V-4-24.
- SCAQMD. 2003c. Health Risk Assessment Guidance for Analyzing Cancer Risks from Mobile Source Diesel Idling Emissions for CEQA Air Quality Analysis. Accessed January 2022. http://www.aqmd.gov/docs/default-source/ceqa/handbook/mobile-source-toxics-analysis.doc? sfvrsn=2.
- SCAQMD. 2005. Guidance Document for Addressing Air Quality Issues in General Plans and Local Planning. Accessed October 27, 2021. http://www.aqmd.gov/docs/default-source/planning/air-quality-guidance/complete-guidance-document.pdf.
- SCAQMD. 2006. Final Methodology to Calculate Particulate Matter (PM) 2.5 and PM 2.5 Significance Thresholds. October. Accessed October 27, 2021. http://www.aqmd.gov/docs/default-source/ceqa/handbook/localized-significance-thresholds/particulate-matter-(pm)-2.5-significance-thresholds-and-calculation-methodology/final_pm2_5methodology.pdf?sfvrsn=2.
- SCAQMD. 2008a. Final Localized Significance Threshold Methodology, June 2003, Revised July 2008. Accessed October 27, 2021. http://www.aqmd.gov/docs/default-source/ceqa/handbook/localized-significance-thresholds/final-lst-methodology-document.pdf.

- SCAQMD. 2008b. South Coast Air Quality Management District, Draft Pilot Study of High Performance Air Filtration for Classrooms Applications, October 2008.
- SCAQMD. 2016. NAAQS/CAAQS and Attainment Status for South Coast Air Basin, February. Accessed October 27, 2021. http://www.aqmd.gov/docs/default-source/clean-air-plans/air-quality-management-plans/naaqs-caaqs-feb2016.pdf.
- SCAQMD. 2017a. Final 2016 Air Quality Management Plan (AQMP), March. http://www.aqmd.gov/docs/default-source/clean-air-plans/air-quality-management-plans/2016-air-quality-management-plan/final-2016-aqmp/final2016aqmp.pdf?sfvrsn=15.
- SCAQMD. 2017b. Air Quality Modeling, https://www.aqmd.gov/home/rules-compliance/ceqa/air-quality-modeling. Accessed October 27, 2021.
- SCAQMD. 2021a. Historical Data by Year, (2018-2020). Accessed July 2021 http://www.aqmd.gov/home/air-quality/air-quality-data-studies/historical-data-by-year. .
- SCAQMD. 2021b. Multiple Air Toxics Exposure Study, MATES V Cancer Risk Interactive Map. Accessed October 27, 2021. https://experience.arcgis.com/experience/79d3b6304912414bb21ebdde80100b23/page/home/?views=view_38%2Cview_1.
- Stantec. 2022. Wiley Canyon Mixed-Use Traffic Analysis, July 11.
- USDOT. 2018. U.S. Department of Transportation Federal Highway Administration, Updated Interim Guidance on Mobile Source Air Toxic Analysis in NEPA Documents. Accessed December 6, 2021. https://www.fhwa.dot.gov/ENVIRonment/air_quality/air_toxics/policy_and_guidance/msat/nmsatetrends.cfm.
- USEPA. 2004. Air Toxics Risk Assessment Reference Library, Volume 1 Technical Resource Manual. April 2004. page 2-1. Air Toxics Risk Assessment Reference Library, Volume 1 Technical Resource Manual, EPA-453-K-04-001A. Accessed December 6, 2021.
- USEPA. 2017. Clean Air Act Overview, Clean Air Act Table of Contents by Title, Last Updated January 3, 2017. Accessed October 27, 2021 https://www.epa.gov/clean-air-act-overview/clean-air-act-text. As shown therein, Title I addresses nonattainment areas and Title II addresses mobile sources.
- USEPA. 2021a. United States Environmental Protection Agency (USEPA), Health Effects of Ozone Pollution, Accessed December 6, 2021. https://www.epa.gov/ground-level-ozone-pollution/health-effects-ozone-pollution.
- USEPA. 2021b. Nitrogen Dioxide (NO₂) Pollution, https://www.epa.gov/no2-pollution/basic-information-about-no2. Accessed December 6, 2021.
- USEPA. 2021c. Carbon Monoxide (CO) Pollution in Outdoor Air, https://www.epa.gov/co-pollution/basic-information-about-carbon-monoxide-co-outdoor-air-pollution. Accessed December 6, 2021.
- USEPA. 2021d. Sulfur Dioxide (S02) Pollution, https://www.epa.gov/so2-pollution/sulfur-dioxide-basics. Accessed December 6. 2021.

- USEPA. 2021e. Particulate Matter (PM) Pollution, https://www.epa.gov/pm-pollution/particulate-matter-pm-basics. Accessed December 6, 2021.
- USEPA. 2021f. Lead Air Pollution, https://www.epa.gov/lead-air-pollution/basic-information-about-lead-air-pollution. Accessed December 6, 2021.
- USEPA. 2021g. Hazardous Air Pollutants, https://www.epa.gov/haps. Accessed December 6, 2021.
- USEPA. 2021h. Summary of the Clean Air Act, https://www.epa.gov/laws-regulations/summary-clean-air-act. Accessed October 27, 2021.
- USEPA. 2021i. NAAQS Table, https://www.epa.gov/criteria-air-pollutants/naaqs-table. Accessed October 27, 2021.

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4.3 Biological Resources

This section describes the existing conditions of the Wiley Canyon Project (project) site and vicinity related to biological resources, identifies associated regulatory requirements, thresholds of significance, methodology, impact analysis, mitigation measures, level of significance after mitigation, cumulative impacts analysis, and references. The Study Area is defined as the approximately 31-acre project site and a 100-foot buffer around the project site, for a total of 45.3 acres. Information contained in this section is based on publicly available data and reports, as well as the following:

Appendix C-1 Biological Resources Report, prepared by Environmental Science Associates

Appendix C-2 Oak Tree Report, prepared by Environmental Science Associates

Appendix C-3 Aquatic Resources Delineation Report, prepared by Environmental Science Associates

4.3.1 Environmental Setting

This section describes the existing conditions in the regional and local vicinity as well as within the project site and identifies the biological resources that could be affected by the project.

4.3.1.1 Regional Setting

The project site is surrounded by urban and suburban development, and vacant land that has been previously disturbed by past agricultural activities and limited commercial use. A mobile home development, known as the Mulberry Mobile Home Park, borders the site to the north. A flood control channel is located between the northern segments of the project site and Wiley Canyon Road, and single-family residences are located northeast of the project boundary. Wiley Canyon Road, a north-south two-lane roadway, partially borders the site to the east, and existing electrical power lines run north-south on the eastern edge of the Wiley Canyon Road right-of way. To the south of the project site is a commercial area with a range of uses including Valley Vascular Associates, Academy Swim Club, Survival of the Fittest Health and Wellness, and the Santa Clarita Athletic Club. Interstate 5 (I-5) borders the site to the west, separated from the project site by a chain-linked fence.

The project site is located in the Upper Santa Clara River East Subbasin hydraulic area. Surface water is drained by the Santa Clara River, Bouquet Creek, and Castaic Creek (Santa Clarita Valley Groundwater Sustainability Agency 2022). The South Fork of the Santa Clara River, located on the eastern margin of the project site, leads to the Santa Clara River approximately 3.75 miles northeast of the project site.

4.3.1.2 Project Setting

The project Study Area (31-acre project site and 100-foot buffer) is located within the jurisdiction of the City of Santa Clarita (City). The project site is situated on the east side of the I-5 freeway, west of Wiley Canyon Road, and north of Calgrove Boulevard. The project site is former agricultural land with large expanses of highly disturbed land surrounded by fencing, some former mule farm facilities, and various accessory buildings associated with the former mule farm operations. Plant communities typically found within the region include a mosaic of xeric communities such as coastal sage scrub and chaparral throughout lower elevations directly abutted by development and ruderal habitats. The habitats and resources found within the region are known to support a wide

variety of common plant and wildlife species, as well as many special-status species protected by federal, state, and/or local regulations.

The topography of the site remains flat throughout the majority of the site at 1300 feet. Elevations on site range from a low of approximately 1,282 feet above mean sea level (MSL) within the south fork of the Santa Clara River, to approximately 1,400 feet above MSL on the parcel north of Wiley Canyon Road (APN 2825-012-007). Two soil types were mapped for the project (NRCS 2018), Yolo Loam, fan piedmont, 0 to 9 percent slope, MLRA 20 was the dominant soil type throughout the flat portions of the site, and Saugus loam, 30 to 50 percent slopes comprised the slopes on the north side of Wiley Canyon Road (NRCS 2020).

The project site lies roughly 0.50 mile to the northeast of the Santa Clarita Woodlands Park and Ed Davis Park at Towsley Canyon. The Study Area is generally surrounded to the north, west, east, and south by developed land and the I-5 freeway.

Vegetation

Descriptions of each plant community found on the Study Area based on the classification specific to <u>A Manual of California Vegetation</u>, Edition 2 (Sawyer et. al 2009) are provided below. Table 4.3-1, Vegetation Communities and Land Cover on the Project Site, lists each of the plant communities observed, as well as the acreage within the Study Area, and locations of each of the communities are shown in Figure 4.3-1, Vegetation Communities and Land Cover on the Project Site. The vegetation communities discussed are composed of a variety of plant species, both native and non-native. Observations regarding the plant species present were made during the field visit to the project site, and a list of all plant species identified is provided in Appendix C-1.

Table 4.3-1. Vegetation Communities and Land Cover on the Project Site

Vegetation Alliances/Land Cover Types	Common Name	Rank (Global/ State) ¹	Acres
Forest and Woodland Alliances			
Platanus racemosa Woodland	California sycamore woodlands	G3S3	0.12
Populus fremontii Forest	Fremont cottonwood forest	G4S3	1.31
Populus fremontii/Baccharis salicifolia Forest	Fremont cottonwood/mule fat forest	G2S3	0.48
Quercus agrifolia/Coastal Sage Scrub	coast live oak/coastal sage scrub	NA	0.13
Quercus agrifolia-Salix lasiolepis-Nicotiana glauca Woodland	coast live oak-arroyo willow-tree tobacco woodland	NA	0.41
Shrubland and Grassland Alliances			
Adenostoma fasciculatum Shrubland	chamise chaparral	G5S5	0.10
Artemisia tridentata Shrubland	big Sagebrush	G5S5	1.57
Baccharis salicifolia Shrubland	mulefat thickets	G5S4	0.70
Eriogonum fasciculatum Shrubland	California buckwheat scrub	G5S5	0.48
Salix lasiolepis Shrubland	arroyo willow thickets	G4S4	0.29
Disturbed, Ornamental, and Developed L	and Cover Types		
Developed	Developed	Not ranked	16.20
Non-native Woodland	Non-native Woodland	Not ranked	0.83

Table 4.3-1. Vegetation Communities and Land Cover on the Project Site

Vegetation Alliances/Land Cover Types		Rank (Global/ State) ¹	Acres
Ruderal	Ruderal	Not ranked	22.65
		Total Acreage	45.27

Source: Appendix C-1.

Forest and Woodland

California Sycamore Woodlands (Platanus racemosa Woodland Alliance)

California sycamore woodlands has California sycamore (*Platanus racemosa*) as the dominant species in the tree layer, with mulefat and tree tobacco in small quantities in the shrub layer. Within the Study Area, this community occupies a small patch along the South Fork of the Santa Clara River. The California sycamore woodland occupies approximately 0.12 acre.

Fremont Cottonwood Forest (*Populus fremontii* Forest Alliance)

Fremont cottonwood forest has Fremont cottonwood as the dominant species, with a sparse understory. This community typically occurs along perennial and intermittent streams, within floodplains, springs and canyons. Within the Study Area, this community occurs along a portion of the south fork of the Santa Clara River. The Fremont cottonwood forest occupies 1.31 acres.

Fremont Cottonwood / Mulefat Forest (Populus fremontii / Baccharis salicifolia Forest Alliance)

Fremont cottonwood / mulefat forest has Fremont cottonwood (*Populus fremontii* ssp. *fremontii*) as the dominant species, with mulefat (*Baccharis salicifolia* ssp. *salicifolia*) as the dominant scrub layer species. This community typically occurs along perennial and intermittent streams, within floodplains, springs and canyons. Within the Study Area, this community occurs to the east of I-5 freeway where the Southern Fork of the Santa Clara River conveys flows in a covered box channel beneath the freeway. The Fremont cottonwood / mulefat forest occupies approximately 0.48 acre.

Coast Live Oak / Coastal Sage Scrub (Quercus agrifolia / Coastal Sage Scrub)

Coast live oak / coastal sage scrub has an overstory of coast live oak (*Quercus agrifolia*) as the dominant species and an understory of coastal sage species including California sagebrush (*Artemisia californica*) and California buckwheat (*Eriogonum fasciculatum*). This community typically occurs in a variety of habitats including upland savannahs and woodlands, to riparian forests and canyon lands. Within the Study Area, this community comprises a small portion of the southern boundary. The Coast live oak / coastal sage scrub occupies approximately 0.13 acres.

A conservation status rank (also known as "rarity rank") or a "high inventory priority" designation is used to determine the significance of project impacts to plant communities. The conservation status ranking system consists of a geographic scale (G = Global; S = State) and a degree of threat (1 = critically imperiled; 2 = imperiled; 3 = vulnerable to extirpation or extinction; 4 = apparently secure; and 5 = demonstrably widespread, abundant, or secure). Plant community alliances with global or state conservation status ranks of G1 through G3, or S1 through S3, respectively, are considered to be "natural communities of special concern."

Coast Live Oak-Arroyo Willow-Tree Tobacco Woodland (Quercus agrifolia-Salix lasiolepis-Nicotiana glauca Woodland Alliance)

Coast live oak–arroyo willow–tree tobacco woodland has coast live oak as the dominant species in the tree layer, with arroyo willow, and tree tobacco (*Nicotiana glauca*) as dominants in the shrub layer. Within the Study Area, this community occupies a small patch at the very southern boundary of the site. The coast live oak – arroyo willow – tree tobacco woodland occupies approximately 0.41 acre.

Scrub/Shrubland

Chamise Chaparral (Adenostoma fasciculatum Shrubland Alliance)

Chamise chaparral has chamise (*Adenostoma fasciculatum*) as the dominant species in the shrub layer, with California buckwheat, Whipple's yucca (*Hesperoyucca whipplei*) and nonnative grasses as common understory plants and typically occurs on dry, shallow colluvial soils on sun exposed slopes at low to moderate elevations. Within the Study Area, this community occupies the upslope area northeast of Wiley Canyon Road, outside of the development area. The chamise chaparral occupies approximately 0.10 acres.

Big Sagebrush (Artemisia tridentata Shrubland Alliance)

Big sagebrush has common sagebrush (*Artemisia tridentata*) as the dominant species in the scrub layer, lacking other dominant species This scrub typically grows on plains, alluvial fans, valley bottoms, and dry washes. Within the Study Area, this community occupies a portion of the site east of the southern portion of the South Fork of the Santa Clara River. Big sagebrush occupies approximately 1.57 acres.

Mulefat Thickets (Baccharis salicifolia Shrubland Alliance)

Mulefat thickets has mulefat as the dominant species in the shrub canopy. This scrub typically occurs in canyon bottoms, floodplains, lake margins, and streambeds at low to moderate elevations. Within the Study Area, this community occupies a portion of the South Fork of the Santa Clara River. Mulefat thickets occupies approximately 0.70 acres.

California Buckwheat Scrub (Eriogonum fasciculatum Shrubland Alliance)

California buckwheat scrub has California buckwheat as the dominant species, with California sagebrush, and deer weed (*Acmispon glaber*) as sub dominants. Within the Study Area, this community occupies small areas on the east-facing slopes along the boundary with Interstate 5 Freeway. The California buckwheat scrub occupies approximately 0.48 acre.

Arroyo Willow Thickets (Salix lasiolepis Shrubland Alliance)

Arroyo willow thickets has arroyo willow (*Salix lasiolepis*) as the dominant species in the tree or scrub layer, with subdominant species including mulefat, California sagebrush and Fremont cottonwood. This scrub typically grows on seasonally or intermittently flooded sites. Within the Study Area, this community occupies a portion of the South Fork of the Santa Clara River. Arroyo willow thickets occupies approximately 0.29 acre.

Disturbed, Ornamental, and Developed Land Cover Types

Developed

The developed areas on the Study Area included the I-5 freeway, Wiley Canyon Road, and Calgrove Boulevard. It also included facilities and residences on site, as well as residential developments directly to the east, and north. Developed land use comprised approximately 16.2 acres.

Non-native Woodland

This community is dominated by primarily non-native, landscape trees and occurs on various slopes and aspects. On the Study Area, the community is consisted of deodar cedar (*Cedrus deodara*) and Canary Island pine (*Pinus canariensis*) that were planted around a retention pond and in the vicinity of former residences on the property. Non-native woodland occupied approximately 0.83 acres.

Ruderal

The species assemblage and community characteristics of the ruderal habitat was largely disturbed by agricultural activity and the understory was primarily dominated by non-native forbs such as tocalote (*Centaurea melitensis*), and shortpod mustard (*Hirschfeldia incana*) and non-native grasses as a result of the previous intensive agricultural uses. Ruderal habitat comprises the majority of the proposed impact area on site. This community comprised 22.65 acres.

Wildlife

The plant communities discussed above provide habitat for various common wildlife species. Observations regarding the wildlife species present were made during the field visit to the project site, and a list of all species observed is provided in Appendix C-1. Non-native habitats, such as the ruderal community, in addition to the native habitats, can provide habitat for these species.

Special-Status Species

The following discussion describes the plant and wildlife species present, or potentially present, within the Study Area that have been afforded special recognition by Federal, State, or local resource conservation agencies and organizations. These species have declining or limited population sizes, usually resulting from habitat loss.

Special-Status Plants

Special-status plants include those listed, or candidates for listing, by the USFWS and CDFW, and species considered special-status by the CNPS (particularly CRPR 1A, 1B, 2A, and 2B). A total of 49 special-status plant species were reported in the vicinity based on CNDDB and CNPS within the 9-quadrangle search area. From this search (CDFW 2020, CNPS 2020), one special-status species was identified as having a potential to occur within the Study Area based on the literature review and habitat anticipated within the Study Area; Greata's aster (Symphyotrichum greatae). Two additional CNPS insufficiently known or watch list species (CRPR 3 and 4, respectively) were identified as having potential to occur within the Study Area. These species include ocellated Humboldt lily (Lilium humboldtii ssp. ocellatum) and paniculate tarplant (Deinandra paniculata). These species were not observed during field surveys and were considered absent from the project area. Surveys were conducted during suitable bloom period for all 4 species, and due to the disturbed nature of the site, were determined to be

absent from the Study Area. One CRPR 4 species was observed along the Santa Clara River, southern California black walnut (*Juglans californica*) but the plants occur outside of the proposed impact area and will not be affected by the proposed activities.

Special-Status Wildlife

Special-status wildlife species include those listed as Endangered or Threatened under the FESA or CESA, candidates for listing by the USFWS or CDFW, and species of special concern to the CDFW or USFS. In addition, the Los Angeles Chapter of the Audubon Society has published a list of special-status bird species occurring in Los Angeles County (Los Angeles Audubon, 2009). A total of 52 special-status wildlife species were reported in the vicinity based on CNDDB within the 9-quadrangle search area. From this search, a total of ten species were identified as having some potential to occur within the Study Area or use the Study Area based on the literature review and habitat anticipated within the Study Area.

Of the 52 species, three (3) species were considered to have a moderate potential to occur on the Study Area, including Crotch bumble bee (*Bombus crotchii*), Cooper's hawk (*Accipiter cooperii*), and least Bell's vireo (*Vireo bellii pusillus*). Of the 52 species, marginally suitable habitat exists on site for seven species including California legless lizard (*Anniella spp.*), coastal whiptail (*Aspidoscelis tigris stejnegeri*), arroyo toad (*Anaxyrus californicus*), golden eagle (*Aquila chrysaetos*), Swainson's hawk (*Buteo swainsoni*), southern California rufous-crowned sparrow (*Aimophila ruficeps canescens*), and overwintering California populations of monarch (*Danaus plexippus* pop. 1).

Three watch list species from the Los Angeles County Sensitive Bird Species list were observed within the Study Area: California towhee (*Melozone crissalis*), oak titmouse (*Baeolophus inornatus*) and turkey vulture (*Cathartes aura*). These species were observed foraging within the general area but were not observed nesting in the area and the survey took place during nesting season. However, the Study Area does support potential nesting and foraging habitat for migratory birds (including shrubs and trees).

Protected Trees

The Santa Clarita Municipal Code ("SCMC") protects all native oak trees including, without limitation, canyon oak (*Quercus chrysolepis*), coast live oak, interior live oak (*Quercus wislizenii*), valley oak (*Quercus lobata*), and scrub oak (*Quercus dumosa*¹) in recognition of their historical, aesthetic, and environmental value. Trees protected by the SCMC must have a trunk with a circumference measuring 6 inches (approximately 1.9" diameter) or larger; measured four- and one-half feet above natural grade. Heritage oak trees measuring one hundred eight (108) inches or more in circumference (approximately 34.3-inch diameter) or in the case of a multiple trunk tree, two or more trunks measuring 72 inches each or greater in circumference (approximately 22.9-inch diameter). In addition, the Planning Commission and/or City Council may classify any oak tree as a heritage tree regardless of size, if a majority vote determines a tree has exceptional historic, aesthetic, and/or environmental qualities of major significance or prominence to the community.

A total of 36 oak trees are located on or adjacent to the project site. All 36 trees meet the minimum requirements described in the SCMC. A total of 12 oak trees are on site and an additional 24 oak trees are off-site within the project's planned roadway improvements.

DRAFT EIR FOR WILEY CANYON PROJECT MARCH 2024

Considered Q. dumosa at time of ordinance publication, the species was split into multiple indistinct species. Quercus berberidifolia, which was formerly classified as Q. dumosa is more likely to occur near the City of Santa Clarita. In addition, Q. john-tuckeri, Tucker's oak, has been recorded within the City of Santa Clarita.

All 12 trees on the project site are coast live oaks, including two oaks that qualify as heritage trees (Oaks # 451 and #454), by exceeding the size threshold as described in the City's ordinance. Both of the heritage oaks may be affected by proposed project construction activities. Seven of the oak trees (Oaks # 451 and #453 through #458) occur along the western property boundary and may be offsite in the Caltrans highway right-of-way. Trees #460 and #466 are located east of the project boundary, between the eastern boundary and Calgrove Boulevard. Tree #459 is located outside of the northern portion of the project boundary adjacent to the mobile home park and would be impacted by project construction. A total of 24 oak trees (Oaks #QA1 through #QV22) are located on or immediately adjacent to proposed infrastructure improvements associated with the project entrance or the Wiley Canyon Road, Valley Oak Court, and Calgrove Boulevard intersection. None of the surveyed trees associated with roadway infrastructure improvements qualify for heritage status.

Per the Oak Tree Report (Appendix C-2), barrels of potentially hazardous hydraulic oil were previously found leaking in the vicinity of two oak trees (Oaks #453 and #454) and have been removed since the initial site visit. Oaks #450 through #456 fall within the proposed project design area and Oaks #452, #455, and #456 would be removed as a result of project implementation. Oaks #450, #451, #453, #454, #457, and #459 may be impacted from project construction if any tree requires cutting, pruning, or encroachment. Oaks #QA4 through #QA6, #QA8 through #QA11, #QL12, #QL13, #QL15 through #QL18, and #463 may be encroached upon by construction of the roadway infrastructure improvements. All potential oak tree impacts would require an oak tree permit from the City. As shown in Table 3-2, a total of four oak trees are proposed to be removed, and encroachments are proposed for 19 oak trees.

Table 4.3-2. Oak Tree Plan Summary

Tree No. (#)	Status	Proposed Action
450	None	To be removed
451	Heritage	To be impacted
452	None	To be removed
453	None	To be impacted
454	Heritage	To be impacted
455	None	To be removed
456	None	To be removed
457	None	To be impacted
459	None	To be impacted
QA4	None	To be impacted
QA5	None	To be impacted
QA6	None	To be impacted
QA8	None	To be impacted
QA9	None	To be impacted
QA10	None	To be impacted
QA11	None	To be impacted
QL12	None	To be impacted
QL13	None	To be impacted
QL15	None	To be impacted
QL16	None	To be impacted
QL17	None	To be impacted
QL18	None	To be impacted

Table 4.3-2. Oak Tree Plan Summary

Tree No. (#)	Status	Proposed Action
463	None	To be impacted

Source: Appendix C-2, Oak Tree Report

See Figure 3-4a through 3-4c, Tentative Tract Map, of Chapter 3, Project Description, of this Draft EIR, for existing oak tree locations.

Jurisdictional Waters

A formal jurisdictional determination was conducted, and the Study Area was evaluated for any potential jurisdictional features that may be present. The findings are presented within Appendix C-3. In summary, the two aquatic features mapped from the field delineation are considered to be waters of the U.S., waters of the State, and features subject to Fish and Game Code Section 1600, et seq. A discussion of both follows below and is illustrated in Figure 4.3-2, Aquatic Resources.

South Fork Santa Clara River (IS-1)

The South Fork Santa Clara River is an intermittent stream originating in the Santa Susana Mountains, just east of East Canyon. It generally parallels the I-5 freeway until it reaches the Study Area. This stream is heavily modified and channelized (i.e., concrete-lined) as it flows through urbanized areas. Riparian or alluvial scrub vegetation is generally present in the earthen segments of the stream. Within the Study Area, the stream segment (IS-1) is dominated by Fremont cottonwood forest/woodland and flows northeasterly across the site.

Unnamed Intermittent Stream (IS-2)

IS-2 is an intermittent stream originating in La Salle Canyon, south of the Study Area and east of the I-5 freeway. IS-2 flows in a northerly direction down the canyon, and then enters a detention basin prior to an underground culvert that is connected to the southern portion of the Study Area. Within the Study Area, IS-2 is dominated by coast live oak and ruderal habitats.

Habitat Linkages and Wildlife Movement Corridors

The fragmentation of open space areas by urbanization creates isolated "islands" of wildlife habitat. Wildlife corridors link together areas of suitable habitat that are otherwise separated by rugged terrain, changes in vegetation, or human disturbance. The project site does not represent significant corridors for wildlife movement to and from adjacent sites. The South Fork of the Santa Clara River is a regional wildlife movement corridor. The South Fork of the Santa Clara River is channelized, both north and south of the project site. The majority of the Santa Clara River on site is natural and persists as a wildlife refuge as numerous species can access this area for shelter, water, and food sources. A majority of this area would be maintained, and the project proposes to widen the existing channel to create additional riparian habitat. The majority of wildlife movement likely occurs to the southeast of the Study Area, in the open spaces east of the I-5 freeway (Ed Davis Park, Towsley Canyon, Santa Clarita Woodlands Park, Lyons Ranch).

The Project site is not within any linkages identified by the South Coast Missing Linkages report; the nearest linkage design identified is for the Santa Monica-Sierra Madre Connection located approximately 1.4 miles southeast of the project site (South Coast Wildlands 2008). The I-5 freeway and surrounding development act as the primary

barrier to wildlife movement in the area. Since the project site is not identified as a linkage by the South Coast Wildlands, and it does not support habitat that connects two or more habitat patches that would otherwise be fragmented or isolated from one another, the project site is not considered a wildlife corridor.

4.3.2 Regulatory Framework

Federal

Federal Endangered Species Act

The federal Endangered Species Act (FESA) (16 USC section 1531, et seq.) is administered by the U.S. Fish and Wildlife Service (USFWS) for most plant and animal species, and by the National Oceanic and Atmospheric Administration National Marine Fisheries Service for certain marine species. FESA is intended to provide a means to conserve the ecosystems upon which endangered and threatened species depend, and to provide programs for the conservation of those species, thus preventing extinction of plants and wildlife. FESA defines an endangered species as "any species that is in danger of extinction throughout all or a significant portion of its range." A threatened species is defined as "any species that is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range." Under FESA, it is unlawful to take any listed species; "take" is defined as "harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct."

FESA allows for the issuance of incidental take permits for listed species under Section 7, which is generally available for Projects that also require other federal agency permits or other approvals, and under Section 10, which provides for the approval of habitat conservation plans on private property without any other federal agency involvement. Upon development of a habitat conservation plan, USFWS can issue incidental take permits for listed species.

Migratory Bird Treaty Act

The Migratory Bird Treaty Act (16 USC section 703, et seq.), as amended, prohibits the intentional take of any migratory bird or any part, nest, or eggs of any such bird. Under the Migratory Bird Treaty Act, "take" is defined as pursuing, hunting, shooting, capturing, collecting, or killing, or attempting to do so. In 2017, Department of the Interior Principal Deputy Solicitor Jorjani issued a memorandum (M-37050) that interprets the Migratory Bird Treaty Act's "take" prohibition to apply only to affirmative actions that have as their purpose the taking or killing of migratory birds, their nests, or their eggs. Unintentional or accidental take is not prohibited. Additionally, Executive Order 13186, Responsibilities of Federal Agencies to Protect Migratory Birds, requires that any project with federal involvement address impacts of federal actions on migratory birds with the purpose of promoting conservation of migratory bird populations (66 Federal Register 3853–3856). The Executive Order requires federal agencies to work with USFWS to develop a memorandum of understanding. USFWS reviews actions that might affect these species.

Clean Water Act

The Clean Water Act provides guidance for the restoration and maintenance of the chemical, physical, and biological integrity of the nation's waters. Section 401 requires a project operator for a federal license or permit that allows activities resulting in a discharge to waters of the United States to obtain state certification, thereby ensuring that the discharge will comply with provisions of the Clean Water Act. The Regional Water Quality Control Boards

(RWQCBs) administer the certification program in California. Section 402 establishes a permitting system for the discharge of any pollutant (except dredged or fill material) into waters of the United States. Section 404 establishes a permit program administered by U.S. Army Corps of Engineers (Corps) that regulates the discharge of dredged or fill material into waters of the United States, including wetlands. Corps implementing regulations are found at 33 Code of Federal Regulations 320 and 330. Guidelines for implementation are referred to as the Section 404(b)(1) Guidelines, which were developed by the U.S. Environmental Protection Agency in conjunction with Corps (40 CFR 230). The guidelines allow the discharge of dredged or fill material into the aquatic system only if there is no practicable alternative that would have less adverse impacts.

Wetlands and Other Waters of the United States

Aquatic resources, including riparian areas, wetlands, and certain aquatic vegetation communities, are considered sensitive biological resources and can fall under the jurisdiction of several regulatory agencies. Corps exerts jurisdiction over waters of the United States, including all waters that are subject to the ebb and flow of the tide; wetlands and other waters such as lakes, rivers, streams (including intermittent or ephemeral streams), mudflats, sandflats, sloughs, prairie potholes, vernal pools, wet meadows, playa lakes, or natural ponds; and tributaries of the above features.

The extent of waters of the United States is generally defined as that portion that falls within the limits of an ordinary high-water mark (OHWM). Typically, the OHWM corresponds to the water surface elevation of a 2-year flood event (USACE 2008). In addition, waters of the United States may include wetlands, including swamps, bogs, seasonal wetlands, seeps, marshes, and similar areas, defined by Corps as "those areas that are inundated or saturated by surface or groundwater 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" (33 CFR 328.3[b]; 40 CFR 230.3[t]). Indicators of three wetland parameters (i.e., hydric soils, hydrophytic vegetation, and wetlands hydrology), as determined by field investigation, must be present for a site to be classified as a wetland by Corps.

State

California Endangered Species Act

The California Department of Fish and Wildlife (CDFW) administers the California Endangered Species Act (CESA), which prohibits the take of plant and animal species d identified by the Code of California Regulations (CCR) as endangered or threatened in California. Under CESA Section 86, "take" is defined as "hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill." CESA Section 2053 provides that state agencies may not approve Projects that will "jeopardize the continued existence of any endangered species or threatened species, or result in the destruction or adverse modification of habitat essential to the continued existence of those species, if there are reasonable and prudent alternatives available consistent with conserving the species or its habitat which would prevent jeopardy."

CESA defines an endangered species as "a native species or subspecies of a bird, mammal, fish, amphibian, reptile, or plant which is in serious danger of becoming extinct throughout all, or a significant portion, of its range due to one or more causes, including loss of habitat, change in habitat, overexploitation, predation, competition, or disease." CESA defines a threatened species as "a native species or subspecies of a bird, mammal, fish, amphibian, reptile, or plant that, although not presently threatened with extinction, is likely to become an endangered species in the foreseeable future in the absence of the special protection and management efforts required by this chapter. Any animal determined by the Commission as rare on or before January 1, 1985, is a threatened species." A

candidate species is defined as "a native species or subspecies of a bird, mammal, fish, amphibian, reptile, or plant that the Commission has formally noticed as being under review by the department for addition to either the list of endangered species or the list of threatened species, or a species for which the Commission has published a notice of proposed regulation to add the species to either list." CESA does not list invertebrate species.

Porter-Cologne Water Quality Control Act

Pursuant to provisions of the Porter–Cologne Act, the Regional Water Quality Control Board (RWQCB) regulates discharging waste, or proposing to discharge waste, within any region that could affect a water of the state (Water Code Section 13260[a]). The State Water Resources Control Board defines a water of the state as "any surface water or groundwater, including saline waters, within the boundaries of the state" (Water Code Section 13050[e]). As of 2019, the State Water Resources Control Board has narrowed its definition of a waters of the state to include the following:

- 1. Natural wetlands,
- 2. Wetlands created by modification of a surface water of the state,
- 3. Artificial wetlands that meet any of the following criteria:
 - a. Approved by an agency as compensatory mitigation for impacts to other waters of the state, except where the approving agency explicitly identifies the mitigation as being of limited duration;
 - b. Specifically identified in a water quality control plan as a wetland or other water of the state;
 - c. Resulted from historic human activity, is not subject to ongoing operation and maintenance, and has become a relatively permanent part of the natural landscape; or
 - d. Greater than or equal to one acre in size unless the artificial wetland was constructed and is currently used and maintained, primarily for one or more of the following purposes: industrial or municipal wastewater treatment or disposal; settling of sediment; detention, retention, infiltration, or treatment of stormwater runoff and other pollutants or runoff subject to regulation under a municipal, construction, or industrial permitting program; treatment of surface waters; agricultural crop irrigation or stock watering; fire suppression; industrial processing or cooling water; active surface mining even if the site is managed for interim wetlands functions and values; log storage; treatment, storage, or distribution of recycled water; maximizing groundwater recharge (this does not include wetlands that have incidental groundwater recharge benefits); or fields flooded for rice growing.

All waters of the United States are waters of the state. Wetlands, such as isolated seasonal wetlands, that are not generally considered waters of the United States are considered waters of the state if, "under normal circumstances, (1) the area has continuous or recurrent saturation of the upper substrate caused by groundwater, or shallow surface water, or both; (2) the duration of such saturation is sufficient to cause anaerobic conditions in the upper substrate; and (3) the area's vegetation is dominated by hydrophytes or the area lacks vegetation." (SWRCB 2019).

Before USACE will issue a CWA Section 404 permit, applicants must receive a CWA Section 401 Water Quality Certification from the RWQCB. If a CWA Section 404 permit is not required for the Project, the RWQCB may still require a permit (waste discharge requirements for impacts to waters of the state under the Porter–Cologne Act.

California Fish and Game Code

Fully Protected Species. Fish and Game Code Sections 3511, 4700, 5050, and 5515 protect specific mammals, birds, reptiles, amphibians, and fish. Species that are fully protected by these sections may not be taken or possessed at any time. CDFW cannot issue permits or licenses that authorize the "take" of any fully protected species, except under certain circumstances, such as scientific research and live capture and relocation of such species pursuant to a permit for the protection of livestock. Furthermore, it is the responsibility of the CDFW to maintain viable populations of all native species. Toward that end, the CDFW has designated certain vertebrate species as Species of Special Concern (SSC), because declining population levels, limited ranges, and/or continuing threats have made them vulnerable to extinction.

Fish and Game Section 1602. A project operator is required to notify CDFW before any project that would divert, obstruct, or change the natural flow, bed, channel, or bank of any river, stream, or lake. Pursuant to the code, a "stream" 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. Based on this definition, a watercourse with surface or subsurface flows that supports or has supported riparian vegetation is a stream and is subject to CDFW jurisdiction. Altered or artificial watercourses valuable to fish and wildlife are subject to CDFW jurisdiction. CDFW also has jurisdiction over dry washes that carry water during storm events.

Preliminary notification and project review generally occur during the environmental process. When an existing fish or wildlife resource may be substantially adversely affected, CDFW is required to propose reasonable project changes to protect the resource. These modifications are formalized in a Streambed Alteration Agreement, which becomes part of the plans, specifications, and bid documents for the project.

Nesting Birds. Fish and Game Code Section 3503 makes it unlawful to take, possess, or needlessly destroy the nests or eggs of any bird, except as otherwise provided by California law. Fish and Game Code Section 3503.5 protects all birds of prey (raptors) and their eggs and nests; Fish and Game Code Section 3511 states that fully protected birds or parts thereof may not be taken or possessed at any time; Fish and Game Code Section 3513 makes it unlawful to take or possess any migratory non-game bird as designated in the MBTA.

California Native Plant Protection Act

The Native Plant Protection Act of 1977 (Fish and Game Code Section 1900, et seq.) directed CDFW to carry out the Legislature's intent to "preserve, protect and enhance rare and endangered plants in this State." The Native Plant Protection Act gave the California Fish and Game Commission the power to designate native plants as "endangered" or "rare" and protect endangered and rare plants from take. CESA expanded on the original Native Plant Protection Act and enhanced legal protection for plants, but the Native Plant Protection Act remains part of the California Fish and Game Code. To align with federal regulations, CESA created the categories of "threatened" and "endangered" species. It converted all "rare" wildlife into the act as threatened species but did not do so for rare plants. Thus, there are three listing categories for plants in California: rare, threatened, and endangered. Because rare plants are not included in CESA, mitigation measures for impacts to rare plants are specified in a formal agreement between CDFW and the project proponent.

California Environmental Quality

CEQA requires identification of a Project's potentially significant impacts on biological resources and ways that such impacts can be avoided, minimized, or mitigated. CEQA also provides guidelines and thresholds for use by lead agencies for evaluating the significance of potential impacts.

Special-Status Plants and Wildlife. The CEQA Guidelines define endangered wildlife or plants as species or subspecies whose "survival and reproduction in the wild are in immediate jeopardy from one or more causes, including loss of habitat, change in habitat, overexploitation, predation, competition, disease, or other factors" (14 CCR 15380[b][1]). A rare animal or plant is defined in CEQA Guidelines Section 15380(b)(2) as a species that, although not currently threatened with extinction, exists "in such small numbers throughout all or a significant portion of its range that it may become endangered if its environment worsens; or ... [t]he species is likely to become endangered within the foreseeable future throughout all or a significant portion of its range and may be considered 'threatened' as that term is used in the federal Endangered Species Act." Additionally, an animal or plant may be presumed to be endangered, rare, or threatened if it meets the criteria for listing as defined further in CEQA Guidelines Section 15380(c).

Special-Status Vegetation Communities. Section IV, Appendix G (Environmental Checklist Form) of the CEQA Guidelines (14 CCR 15000, et seq.) requires an evaluation of impacts to "any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the CDFW or the USFWS."

Local

City of Santa Clarita General Plan

The General Plan is the primary planning document for the incorporated areas of the City, including the project site. The General plan outlines goals and policies that are intended to guide new planning and development efforts within the City in compliance with state requirements. The City's General Plan is part of a larger collaborative planning effort between the City and the County called the "One Valley One Vision" project. This project involves coordination between the City and County for a unified vision for a larger planning area made up of the incorporated and unincorporated areas of the Santa Clarita Valley. While the incorporated areas of the valley are regulated by the City's General Plan, the plan has been prepared to reflect the common goals and policies agreed to as part of the One Valley One Vision project. For unincorporated areas, the County prepared the Santa Clarita Valley Area Plan, which is consistent with the City's General Plan. Both plans reflect the common goals and policies agreed to as part of the One Valley One Vision project. The theme of the City's General Plan and Santa Clarita Valley Area Plan is "Valley of Villages," in recognition of the various communities and neighborhoods within the Santa Clarita Valley that wish to maintain a distinctive character, while at the same time recognizing their place in the big picture plan for development within the entire planning area.

The Conservation and Open Space Element of the City's General Plan contains goals and policies that are applicable to the biological resources in the City (City of Santa Clarita 2011a). The goals and policies within the Conservation and Open Space Element outline the City's long-term vision of maintaining and providing open space for the

residents of Santa Clarita Valley while also ensuring that new open space and recreational resources contribute to the community character of the region (City of Santa Clarita 2011a).

- Goal CO 3: Conservation of biological resources and ecosystems, including sensitive habitats and species.
 - Objective CO 3.1: In review of development plans and projects, encourage conservation of existing natural areas and restoration of damaged natural vegetation to provide for habitat and biodiversity.
 - Policy CO 3.1.1: On the Land Use Map and through the development review process, concentrate development into previously developed or urban areas to promote infill development and prevent sprawl and habitat loss, to the extent feasible.
 - Policy CO 3.1.2: Avoid designating or approving new development that will adversely impact wetlands, floodplains, threatened or endangered species and habitat, and water bodies supporting fish or recreational uses, and establish an adequate buffer area as deemed appropriate through site specific review.
 - Policy CO 3.1.3: On previously undeveloped sites ("greenfields"), identify biological resources and incorporate habitat preservation measures into the site plan, where appropriate. (This policy will generally not apply to urban infill sites, except as otherwise determined by the reviewing agency).
 - Policy CO 3.1.4: For new development on sites with degraded habitat, include habitat restoration measures as part of the project development plan, where appropriate.
 - Policy CO 3.1.5: Promote the use of site-appropriate native or adapted plant materials, and prohibit use of invasive or noxious plant species in landscape designs.
 - Policy CO 3.1.6: On development sites, preserve and enhance natural site elements including existing water bodies, soil conditions, ecosystems, trees, vegetation and habitat, to the extent feasible.
 - Policy CO 3.1.7: Limit the use of turf-grass on development sites and promote the use of native or adapted plantings to promote biodiversity and natural habitat.
 - Policy CO 3.1.8: On development sites, require tree planting to provide habitat and shade to reduce the heat island effect caused by pavement and buildings.
 - Policy CO 3.1.9: During construction, ensure preservation of habitat and trees designated to be protected through use of fencing and other means as appropriate, so as to prevent damage by grading, soil compaction, pollution, erosion or other adverse construction impacts.
 - Policy CO 3.1.10: To the extent feasible, encourage the use of open space to promote biodiversity.

- Policy CO 3.1.11: Promote use of pervious materials or porous concrete on sidewalks to allow for planted area infiltration, allow oxygen to reach tree roots (preventing sidewalk lift-up from roots seeking oxygen), and mitigate tree-sidewalk conflicts, in order to maintain a healthy mature urban forest
 - Objective CO 3.2: Identify and protect areas which have exceptional biological resource value due to a specific type of vegetation, habitat, ecosystem, or location.
- Policy CO 3.2.1: Protect wetlands from development impacts, with the goal of achieving no net loss (or functional reduction) of jurisdictional wetlands within the planning area.
- Policy CO 3.2.2: Ensure that development is located and designed to protect oak, and other significant indigenous woodlands.
- Policy CO 3.2.3: Ensure protection of any endangered or threatened species or habitat, in conformance with State and federal laws.
- Policy CO 3.2.4: Protect biological resources in the designated Significant Ecological Areas (SEAs) through the siting and design of development which is highly compatible with the SEA resources. Specific development standards shall be identified to control the types of land use, density, building location and size, roadways and other infrastructure, landscape, drainage, and other elements to assure the protection of the critical and important plant and animal habitats of each SEA. In general, the principle shall be to minimize the intrusion and impacts of development in these areas with sufficient controls to adequately protect the resources.
 - Objective CO 3.3: Protect significant wildlife corridors from encroachment by development that would hinder or obstruct wildlife movement.
- Policy CO 3.3.1: Protect the banks and adjacent riparian habitat along the Santa Clara River and its tributaries, to provide wildlife corridors.
- Policy CO 3.3.2: Cooperate with other responsible agencies to protect, enhance, and extend the Rim of the Valley trail system through Elsmere and Whitney Canyons, and other areas as appropriate, to provide both recreational trails and wildlife corridors linking the Santa Susana and San Gabriel Mountains.
- Policy CO 3.3.3: Identify and protect one or more designated wildlife corridors linking the Los Padres and Angeles National Forests through the Santa Clarita Valley (the San Gabriel-Castaic connection).
- Policy CO 3.3.4: Support the maintenance of Santa Clarita Woodlands Park, a critical component of a cross-mountain range wildlife habitat corridor linking the Santa Monica Mountains to the Angeles and Los Padres National Forests.
- Policy CO 3.3.5: Encourage connection of natural open space areas in site design, to allow for wildlife movement.
 - Objective CO 3.4: Ensure that development in the Santa Clarita Valley does not adversely impact habitat within the adjacent National Forest lands.

- Policy CO 3.4.1: Coordinate with the United States Forest Service on discretionary development projects that may have impacts on the National Forest.
- Policy CO 3.4.2: Consider principles of forest management in land use decisions for projects adjacent to the National Forest, including limiting the use of invasive species, discouraging off-road vehicle use, maintaining fuel modification zones and fire access roads, and other measures as appropriate, in accordance with the goals set forth in the Angeles National Forest Land Management Plan.
- Policy CO 3.4.3: On the Land Use Map, maintain low density rural residential and open space uses adjacent to forest land, and protect the urban-forest interface area from overdevelopment.
- Policy CO 3.4.4: Participate as a stakeholder in planning efforts by the United States Forest Service for land uses within the National Forest, providing input as appropriate.
 - Objective CO 3.5: Maintain, enhance, and manage the urban forest throughout developed portions of the Santa Clarita Valley to provide habitat, reduce energy consumption, and create a more livable environment.
- Policy CO 3.5.1: Continue to plant and maintain trees on public lands and within the public right-of-way to provide shade and walkable streets, incorporating measures to ensure that roots have access to oxygen at tree maturity, such as use of porous concrete.
- Policy CO 3.5.2: Where appropriate, promote planting of trees that are native or climactically appropriate to the surrounding environment, emphasizing oaks, sycamores, maple, walnut, and other native species in order to enhance habitat, and discouraging the use of introduced species such as eucalyptus, pepper trees, and palms except as ornamental landscape features.
- Policy CO 3.5.3: Pursuant to the requirements of the zoning ordinance, protect heritage oak trees that, due to their size and condition, are deemed to have exceptional value to the community.
 - Objective CO 3.6: Minimize impacts of human activity and the built environment on natural plant and wildlife communities.
- Policy CO 3.6.1: Minimize light trespass, sky-glow, glare, and other adverse impacts on the nocturnal ecosystem by limiting exterior lighting to the level needed for safety and comfort; reduce unnecessary lighting for landscaping and architectural purposes, and encourage reduction of lighting levels during non-business nighttime hours.
- Policy CO 3.6.2: Reduce impervious surfaces and provide more natural vegetation to enhance microclimates and provide habitat. In implementing this policy, consider the following design concepts:
 - A. Consideration of reduced parking requirements, where supported by a parking study and/or through shared use of parking areas;

- B. Increased use of vegetated areas around parking lot perimeters; such areas should be designed as bioswales or as otherwise determined appropriate to allow surface water infiltration;
- C. Use of connected open space areas as drainage infiltration areas in lieu of curbed landscape islands, minimizing the separation of natural and landscaped areas into isolated "islands";
- D. Breaking up large expanses of paving with natural landscaped areas planted with shade trees to reduce the heat island effect, along with shrubs and groundcover to provide diverse vegetation for habitat.

Policy CO 3.6.4: Provide public information and support with demonstration sites at City facilities on gardening and landscaping techniques to reduce spread of invasive species and pollution from pesticides and fertilizers that threaten natural ecosystems.

4.3.3 Thresholds of Significance

Impacts to sensitive vegetation communities or riparian habitat, special-status plant species, special-status wildlife species, wildlife corridors and habitat connectivity, and regional resource planning must be analyzed to determine whether such impacts are significant. CEQA Guidelines Section 15064(b) states that an ironclad definition of "significant" effect is not possible because the significance of an activity may vary with the setting. However, CEQA Guidelines Section 15065(a) lists impacts that are helpful in defining whether a project may have a significant effect on the environment. Mandatory findings of significance occur when there is substantial evidence that a project could: (1) substantially degrade the quality of the environment, (2) substantially reduce the habitat of a fish or wildlife species, (3) cause a fish or wildlife population to drop below self-sustaining levels, (4) threaten to eliminate a plant or animal community, or (5) reduce the number or restrict the range of a rare or endangered plant or animal.

The following are the significance thresholds for biological resources provided in the CEQA Appendix G environmental checklist, which states that a project would potentially have a significant effect if it would:

- Have a substantial adverse effect, either directly or through habitat modifications, on any species identified
 as being a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations,
 or by CDFW or USFWS.
- 2. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by CDFW or USFWS.
- 3. Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including but not limited to marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means.
- 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 impedes the use of native wildlife nursery sites.
- 5. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.
- 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.

Additionally, the City's Local Guidelines include the following additional City-specific thresholds related to biological resources, in which a project would have a significant impact of it (City of Santa Clarita 2005):

- The project would result in the removal of any heritage oak trees, as defined in SCMC § 17.17.090, removal
 of more than five oak trees from a project on a site that has an existing single-family residence, or the
 removal of more than three oak trees, proposed as part of any other project.
- 2. The project would result in the disturbance of, or encroachment into, any river, river tributary, riparian habitat, stream or similar waterway identified on a United States Geological Survey map as a "blue-line" watercourse, or any waterway otherwise identified as a significant resource by the City of Santa Clarita.
- 3. The project would result in the disturbance of any habitat known or suspected to contain a plant or animal species listed as endangered on such Federal and/or State lists.
- 4. The project would result in a disturbance to any Significant Ecological Area (SEA) as identified by the City of Santa Clarita.

The evaluation of whether or not an impact to a particular biological resource is significant must consider both the resource itself and the role of that resource in a regional context. Substantial impacts are those that contribute to, or result in, permanent loss of an important resource, such as a population of a rare plant or animal. Impacts may be important locally because they result in an adverse alteration of existing site conditions but considered not significant because they do not contribute substantially to the permanent loss of that resource regionally. The severity of an impact and the offsetting benefits of mitigation are the primary determinants of whether or not that impact can be mitigated to a less-than-significant level.

4.3.4 Impacts Analysis

Direct impacts typically represent the physical alteration (i.e., habitat degradation or loss) of biological conditions that are expected to occur within a site as a result of the project's implementation. Indirect impacts are those reasonably foreseeable effects on remaining or adjacent biological resources that are expected to be caused by the project subsequent to its implementation. Impacts can also be short- or long-term, depending on the duration of the effect on a given biological resource. Short-term impacts are temporary, arising from direct impacts to biological resources during a project's implementation, but not after completion. Long-term impacts result in the permanent modification of a biological resource caused by the project's implementation.

The physical alteration of habitat is not, in itself, a significant impact under CEQA. Significance is determined by comparing physical alteration of habitat to each of the significance threshold criteria defined above. For example, should the alteration of habitat result in the direct or indirect loss or have an otherwise substantial adverse effect on a species identified as a "candidate, sensitive, or special-status species in local or regional plans, policies, or regulations or by the CDFG or USFWS," impacts would be considered significant unless a project implements mitigation that would reduce the impact to a less than significant level.

An evaluation of whether an impact on biological resources would be substantial and, therefore, a significant impact must consider both the resource and the CEQA threshold of significance criteria. For example, because of the dependence of most plant and wildlife species on native habitats to satisfy various life cycle requirements, a habitat-based approach that addresses the overall biological value of a particular plant community or habitat area is appropriate when determining whether alteration of that habitat will substantially affect special-status species, sensitive habitats, wetlands, and movement corridors. The relative biological value of a particular habitat area—its functions and values—can be determined by such factors as disturbance history, biological diversity, its importance

to particular plant and wildlife species, its uniqueness or sensitivity status, the surrounding environment, and the presence or absence of special-status resources.

However, direct impacts with respect to specific plant and wildlife resources (e.g., active nests and individual plants and wildlife) are also evaluated and discussed when impacts to these resources, in and of themselves, could be considered significant or in conflict with local, state, and federal statutes or regulations. The significance of impacts with respect to direct impacts to individuals or populations of plant and wildlife species takes into consideration the number of individual plants or animals potentially affected; how common or uncommon the species is, both within a site and from a regional perspective; and the sensitivity status if the species is considered of special status by resource agencies. These factors are evaluated based on the results of on-site biological surveys and studies, results of literature and database reviews, discussions with biological experts, and established and recognized ecological and biodiversity theory and assumptions.

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

Special-Status Plants

No impacts to the South Fork of the Santa Clara River and associated riparian vegetation are proposed as part of the project. Since no special-status plant species were found as a result of the survey, no further action shall be required. Development of the project site would result in the direct removal of common plant species within the ruderal area, which are primarily non-native forb and grass species, as shown in Figure 4.3-3, Impacts to Vegetation Communities. Common plant species present within the Study Area occur in large numbers throughout the region and their removal is not significant. As such, there would be **no impact**.

Special-Status Wildlife

Proposed grading and development of the site would be primarily restricted to ruderal areas within the Study Area. Because vegetation removal would occur within the ruderal area and most of the native vegetation in the remainder of the site would remain intact, these impacts would not be expected to reduce the general wildlife populations below self-sustaining levels within the region, and impacts to common wildlife species do not meet the significance thresholds.

Crotch Bumble Bee

Crotch bumble bee could potentially nest within the big sagebrush and chamise chaparral that is impacted by the project. Crotch bumble bee is a candidate for listing under CESA and is afforded the protection of CESA during the determination process. Consequently, the take of an individual Crotch bumble bee would be **potentially significant**.

Least Bell's Vireo

The project design is anticipated to impact 0.78 acre of marginally suitable habitat for least Bell's vireo. Although not detected during the site survey, protocol surveys are recommended for least Bell's vireo, prior to construction. If protocol surveys indicate the presence of least Bell's vireo, work shall be halted until the qualified biologist can ensure a suitable avoidance or minimization buffer is in place to avoid impacts to this species. If the habitat is

determined to be occupied by least Bell's vireo, then direct impacts to the species and its habitat would occur, meaning the project would result in a **potentially significant** impact on the least Bell's vireo.

Cooper's Hawk

Cooper's hawk could potentially occur as nesting occurs in the woodlands and forests in adjacent to the project site. Although direct impacts to a nest are not anticipated, indirect impacts from construction could cause the adults to leave the nest and young, resulting in a **potentially significant** impact.

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

The project site supports three sensitive plant communities that are considered high priority by CDFW based on their state ranking of S3 or rarer, namely the Fremont cottonwood/mulefat forest (CDFW 2019), Fremont cottonwood forest, and the California sycamore woodland. These communities are located along the drainage channel outside the majority of the proposed impact area. The project would impact 0.09 acre of the Fremont cottonwood/mulefat forest, 0.60 acre of the Fremont cottonwood forest, and 0.09 acre of the California sycamore woodland, as shown in Figure 4.3-3, Impacts to Vegetation Communities Impacts to these communities would result in the loss of riparian and sensitive habitats, which would result in a **potentially significant impact**.

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

The project site includes 1.081-acres (3,209 linear feet) of federally and state protected waters (e.g., wetlands or drainages). The two aquatic features mapped from the field delineation are considered to be waters of the U.S., waters of the State, and features subject to FGC Section 1600 et seq. Both features may be impacted by the proposed project development. The project would impact 0.19 acre of waters of the U.S. and about 1.1 acre of CDFW jurisdiction. The proposed impact is approximately 1,400 linear feet in length, with approximately 400 feet of the 1,400 linear feet being within the existing concrete drainage channel at the northeast end of the project site. The project design avoids approximately 1,800 linear feet of onsite drainages. The project would result in a potentially significant impact to these features.

Threshold BIO-4: Would the project 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 impedes the use of native wildlife nursery sites?

Wildlife Movement

The Study Area supports potential live-in and movement habitat for species on a local scale (i.e., some limited live-in and at least marginal movement habitat for reptile, bird, and mammal species), but the habitat likely provides little to no function to facilitate wildlife movement for wildlife species on a regional scale and is not identified as a regionally important dispersal or seasonal migration corridor. Movement on a local scale is restricted within the project area due to frequent vehicular ingress/egress and human presence, and occurs in more suitable habitats to the north, east and west of the project site. Although implementation of the project would result in disturbances

to local wildlife movement within the project site, those species adapted to disturbed areas would be expected to persist on-site following construction. Impacts would be **less than significant**.

Wildlife Nurseries

The project site and adjacent areas support potential nesting habitat for migratory and residential birds covered under the MBTA and California Fish and Game Code. Project activities may result in direct and/or indirect loss of an active nest, which would result in a **potentially significant** impact.

Threshold BIO-5: Would the Project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

The Study Area supports 36 total oak trees that are primarily located outside or at the periphery of the proposed impacts by the project design. Four oak trees would be removed and 19 may be encroached upon by project construction and/or project operations, including the proposed roadway improvements. An Oak Tree Permit from the City of Santa Clarita would be required for these removals and encroachments, and the permit may require onsite or offsite replacement at a ratio that is based upon the diameter of the trunk of each tree removed.

Protective fencing of not less than five feet in height at the limits of the Tree Protected Zone ("TPZ") of all oak trees within or extending into the property that may be impacted by or are in close proximity (50 feet) to construction activities shall be installed prior to start of construction. The protective fencing shall be inspected by a qualified biologist or arborist prior to grading or ground disturbing activities, and the fencing shall be maintained and remain in place until construction is completed and a certified arborist verifies that it is appropriate to be removed. As such, through compliance with applicable regulations and protection measures, impacts would be **less than significant**.

Threshold BIO-6: Would the project conflict with the provisions of an adopted habitat conservation plan, natural community conservation plan, or other approved local, regional, or state habitat conservation plan?

The Project does not occur within the limits of any adopted HCP, NCCP, or other approved local, regional, or state habitat conservation plan. There would be **no impact** associated with conflicts with the provisions of adopted plans.

Threshold BIO-7: Would the project result in the removal of any heritage oak trees, as defined in Unified Development Code §17.17.090, removal of more than five (5) oak trees from a project on a site that has an existing single-family residence, or the removal of more than three (3) oak trees, proposed as part of any other project?

As discussed under Threshold BIO-5, based on the current site design, 10 oak trees would be removed to implement the project, meaning the project would result in the removal of more than three oak trees. None of the oak trees to be removed are identified as heritage oak trees. An Oak Tree Permit from the City would be required for these removals, which may require onsite or offsite oak tree replacement at a ratio that is based upon the diameter of the trunk of each tree removed. Additionally, the remaining oak trees onsite would be protected through the installation of protective fencing at least five feet in height at the limits of their TPZ. The fencing would remain in place throughout all construction activities and would be removed only after a certified arborist verifies that it is appropriate to be removed. Impacts would be **less than significant**.

Threshold BIO-8: Would the project result in the disturbance of, or encroachment into, any river, river tributary, riparian habitat, stream or similar waterway identified on a United States Geological Survey map as a "blue-line" watercourse, or any waterway otherwise identified as a significant resource by the City of Santa Clarita?

As discussed under Threshold BIO-3, the Study Area contains 1.081-acres (3,209 linear feet) of federally and state protected water, including two aquatic features considered to be waters of the U.S., waters of the State, and features subject or Fish and Game Code Section 1600, et seq., which may be impacted by the proposed project. The project would impact 0.19-acre of waters of the U.S. and about 1.1-acres of CDFW jurisdiction. The proposed impact is approximately 1,400 linear feet in length, with approximately 400 feet of the 1,400 being within the existing concrete drainage channel at the northeast end of the project site. The project would result in a **potentially significant impact** to these features.

Threshold BIO-9: Would the project result in the disturbance of any habitat known or suspected to contain a plant or animal species listed as endangered on such Federal and/or State lists?

As discussed under Threshold BIO-1, the following potential impacts could occur to either plant or animal species listed as endangered on a federal and/or state list.

Special-Status Plants

No impacts to the South Fork of the Santa Clara River and associated riparian vegetation are proposed as part of the project. Since no special-status plant species were found as a result of the survey, no further action shall be required. Development of the project site would result in the direct removal of common plant species within the ruderal area, which are primarily non-native forb and grass species, as shown in Figure 4.3-3, Impacts to Vegetation Communities. Common plant species present within the Study Area occur in large numbers throughout the region and their removal is not significant. As such, there would be **no impact**.

Special-Status Wildlife

Proposed grading and development of the site would be primarily restricted to ruderal areas within the Study Area. Because vegetation removal would occur within the ruderal area and most of the native vegetation in the remainder of the site would remain intact, these impacts would not be expected to reduce the general wildlife populations below self-sustaining levels within the region, and impacts to common wildlife species do not meet the significance thresholds.

Least Bell's Vireo

The project design is anticipated to impact 0.78 acre of marginally suitable habitat for least Bell's vireo. Although not detected during the site survey, protocol surveys are recommended for least Bell's vireo, prior to construction. If protocol surveys indicate the presence of least Bell's vireo, work shall be halted until the qualified biologist can ensure a suitable avoidance or minimization buffer is in place to avoid impacts to this species. If the habitat is determined to be occupied by least Bell's vireo, then direct impacts to the species and its habitat would occur, meaning the project would result in a **potentially significant** impact on the least Bell's vireo.

Cooper's Hawk

Cooper's hawk could potentially occur as nesting occurs in the woodlands and forests in adjacent to the project site. Although direct impacts to a nest are not anticipated, indirect impacts from construction could cause the adults to leave the nest and young, resulting in a **potentially significant** impact.

Threshold BIO-10: Would the project result in a disturbance to any Significant Ecological Area (SEA) as identified by the City of Santa Clarita?

The project site is not located within a designated SEA. Therefore, the project would not result in the disturbance of and SEA, and there would be **no impact.**

4.3.5 Mitigation Measures

The following mitigation measures (MMs) must be implemented during and before project construction in order to reduce potential project-related impacts to biological resources to a less-than-significant level.

MM-BIO-1

Crotch Bumble Bee. A pre-construction survey for Crotch bumble bee must be conducted within the construction footprint before starting of initial vegetation removal or initial grading activities occurring during the Crotch bumble bee nesting period (February 1 through October 31). The survey must confirm that no nests/hives for Crotch bumble bee are located within the construction area. The pre-construction survey must include 1) a habitat assessment and 2) focused surveys, both of which will be based on recommendations described in the "Survey Considerations for California Endangered Species Act (CESA) Candidate Bumble Bee Species," released by the California Department of Fish and Wildlife (CDFW) on June 6, 2023, or the most current at the time of construction.

The habitat assessment must, at a minimum, include historical and current species occurrences; document potential habitat onsite including foraging, nesting, and/or overwintering resources; and identify which plant species are present. For the purposes of this mitigation measure, nest resources are defined as abandoned small mammal burrows, bunch grasses with a duff layer, thatch, hollow trees, brush piles, and man-made structures that may support bumble bee colonies such as rock walls, rubble, and furniture. If nesting resources are present in the impact area, focused surveys will be conducted.

The focused survey will be performed by a biologist with expertise in surveying for bumble bees and include at least three survey passes that are not on sequential days or in the same week, preferably spaced two to four weeks apart. The timing of these surveys must coincide with the Colony Active Period (April 1 through August 31 for Crotch bumble bee). Surveys may occur between one hour after sunrise and two hours before sunset. Surveys will not be conducted during wet conditions (e.g., foggy, raining, or drizzling) and surveyors will wait at least one hour following rain. Optimal surveys are when there are sunny to partly sunny skies that are greater than 60° Fahrenheit. Surveys may be conducted earlier if other bees or butterflies are flying. Surveys may not be conducted when it is windy (i.e., sustained winds greater than 8 mph). Within non-developed habitats, the biologist must look for nest/hive resources suitable for bumble bee use. Ensuring that all nest resources receive 100% visual coverage, the biologist must watch the nest resources for up to five minutes, looking for exiting or entering worker bumble bees. Worker bees should arrive

and exit an active nest site with frequency, such that their presence would be apparent after five minutes of observation. If a bumble bee worker is detected, then a representative individual must be identified to species to determine if it is Crotch bumble bee or one of the common, unregulated species. Biologists should be able to view several burrows at one time to sufficiently determine if bees are entering/exiting them depending on their proximity to one another. It is up to the discretion of the biologist regarding the actual survey viewshed limits from the chosen vantage point which would provide 100% visual coverage; this could include a 30- to 50-foot-wide area. If a nest is suspected, the surveyor can block the entrance of the possible nest with a sterile vial or jar until nest activity is confirmed (no longer than 30 minutes).

Identification will include trained biologists netting/capturing the representative bumble bee in appropriate insect nets, per the protocol in U.S. National Protocol Framework for the Inventory and Monitoring of Bees. The bee must be placed in a clear container for observation and photographic documentation if able. The bee will be photographed using a macro lens from various angles to ensure recordation of key identifying characteristics. If bumble bee identifying characteristics cannot be adequately captured in the container due to movement, the container will be placed in a cooler with ice until the bumble bee becomes inactive (generally within 15 minutes). Once inert, the bumble bee must be removed from the container and placed on a white sheet of paper or card for examination and photographic documentation. Based on implementation of this method on a variety of other bumble bee species, they become active shortly after removal from the cold environment, so photography must be performed quickly. The bumble bee must be released into the same area from which it was captured upon completion of identification.

If Crotch bumble bee nests are not detected, no further mitigation is required, and no additional surveys would be needed if construction begins within 14 days of the last survey for a given phase area. If construction in a given phase area does not start within 14 days of the last survey, or if construction in a given phase area stops for 14 days or longer, surveys would be repeated if construction re-commences between February 1 and October 31.

The mere presence of foraging Crotch bumble bees would not require implementation of additional minimization measures because they can forage up to 10 kilometers from their nests. If nest resources occupied by Crotch bumble bee are detected within the construction area, no construction activities can occur within 100 feet of the nest, or as determined by a qualified biologist through evaluation of topographic features or distribution of floral resources. The nest resources will be avoided for the duration of the Crotch bumble bee nesting period (February 1 through October 31). Outside of the nesting season, it is assumed that no live individuals would be present within the nest as the daughter queens (gynes) usually leave by September, and all other individuals (original queen, workers, males) die. The gyne is highly mobile and can independently disperse to outside of the construction footprint to surrounding open space areas that support suitable hibernacula resources.

A written survey report will be submitted to the City and CDFW within 30 days of the pre-construction survey. The report will include survey methods, weather conditions, and survey results, including a list of insect species observed and a figure showing the locations of any Crotch bumble bee nest sites or individuals observed. The survey report will include the qualifications/resumes of the surveyor(s) and approved biologist(s) for identification of photo vouchers, detailed habitat assessment, and photo vouchers. If Crotch bumble bee nests are observed, the survey report must

also include recommendations for avoidance, and the location information will be submitted to the California Natural Diversity Database (CNDDB) at the time of, or before, submittal of the survey report.

If the above measures are followed, it is assumed that the project need not to obtain authorization from CDFW through the California Endangered Species Act Incidental Take Permit process. If the nest resources cannot be avoided during the nesting period, as outlined in this measure, the project applicant will consult with CDFW regarding the need to obtain an Incidental Take Permit. Any measures determined to be necessary through the Incidental Take Permit process to offset impacts to Crotch bumble bee may supersede measures provided in this CEQA document.

In the event an Incidental Take Permit is needed, mitigation for direct impacts to Crotch bumble bee will be fulfilled through compensatory mitigation at a minimum 1:1 nesting habitat replacement of equal or better functions and values to those impacted by the project, or as otherwise determined through the Incidental Take Permit process. Mitigation will be accomplished either through off-site conservation or through a CDFW-approved mitigation bank. If mitigation is not purchased through a mitigation bank, and lands are conserved separately, a cost estimate will be prepared to estimate the initial start-up costs and ongoing annual costs of management activities for the management of the conservation easement area(s) in perpetuity. The funding source will be in the form of an endowment to help the qualified natural lands management entity that is ultimately selected to hold the conservation easement(s). The endowment amount will be established following the completion of a project-specific Property Analysis Record to calculate the costs of in-perpetuity land management. The Property Analysis Record will take into account all management activities required in the Incidental Take Permit to fulfill the requirements of the conservation easement(s), which are currently in review and development.

MM-BIO-2

Least Bell's Vireo. Before starting construction, a qualified biologist must conduct eight focused surveys within suitable least Bell's vireo habitat between April 10 and July 31, and be spaced a minimum of 10 days apart, in accordance with the 2001 United State Fish and Wildlife Service (USFWS) Least Bell's Vireo Survey Guidelines. The eight focused protocol surveys must be completed, and the results of the surveys be submitted in a draft report to the City for review within 21 days of the completion of surveys. A final report must be prepared and submitted to the City and USFWS within 45 days following the completion of the surveys. If least Bell's vireo is determined to be absent, no further action is required.

If least Bell's vireo is determined to be present based on the results of the protocol surveys, no construction may begin before consulting with California Department of Fish and Wildlife (CDFW) and USFWS for compliance with both the federal and State endangered species acts. Compensatory mitigation for impacts to 0.78 acre of marginally suitable least Bell's vireo habitat must be achieved in conjunction with Mitigation Measure BIO-4 for impacts to a jurisdictional drainage with mitigation ratio of at least 2:1.

MM-BIO-3

Nesting Birds. Before construction that would require removal of potential habitat for raptor and songbird nests between January 15 and September 1, the Project applicant must have a qualified biologist that is approved by the City conduct surveys for any and all active avian nests. Preconstruction nesting bird surveys must be conducted weekly, within 30 days before initiation of ground-disturbing activities to determine the presence of active nests. The surveys should??

continue on a weekly basis with the last survey being conducted not more than three days before the start of clearance/construction work. Surveys should include examination of trees, shrubs, and the ground, within grasslands, for nesting birds, as several bird species known to the area are shrub or ground nesters, including mourning doves. If ground-disturbing activities are delayed, additional preconstruction surveys may be recommended by the City so that not more than three days elapse between the survey and ground-disturbing activities.

If active nests are located during pre-construction surveys, clearing and construction activities within 300 feet of the nest (500 feet for raptors) must be postponed or halted until the nest is vacated and juveniles have fledged, as determined by the biologist, and there is no evidence of a second attempt at nesting. Limits of construction to avoid an active nest must be established in the field with flagging, fencing, or other appropriate barriers and construction personnel should be instructed on the sensitivity of nest areas. The nest buffers may be reduced by the monitoring biologist when there is a biologist present to observe the nest for changes in behavior. The biologist must serve as a construction monitor during those periods when construction activities will occur near active nest areas to ensure that no inadvertent impacts on these nests will occur. The results of the survey, and any avoidance measures taken, shall be submitted to the City within 30 days of completion of the pre-construction surveys and/or construction monitoring to document compliance with applicable state and federal laws pertaining to the protection of native birds.

MM-BIO-4

Sensitive Plant Communities. Before the Building Official issues a grading permit, impacts to sensitive plant communities (e.g., Fremont cottonwood/mulefat forest, Fremont cottonwood forest, and California sycamore woodland) must be mitigated through enhancement or restoration of remaining on-site sensitive plant communities at a ratio of 1:1 or the creation of new sensitive plant communities within the newly created channel area. A habitat mitigation and monitoring plan must be prepared by a City-approved biologist or restoration ecologist and approved by the City before the Public Works Director, or designee, issues a grading permit. The mitigation and monitoring plan must focus on the removal of nonnative elements within disturbed habitat areas of the project site or depict creation areas, planting/restoration methods and success criteria. In addition, this plan must provide details as to its implementation, maintenance, and future monitoring including the following components:

- Description of existing sensitive plant communities on the Project site;
- Summary of permanent impacts to the sensitive community based on approved Project design;
- Proposed mitigation location areas, with description of existing conditions prior to mitigation implementation;
- Detailed description of restoration or enhancement goals;
- Description of implementation schedule, site preparation, erosion control measures, planting plans, and plant materials;
- Provisions for mitigation site maintenance and control on non-native invasive plants; and
- Monitoring plan, including performance standards, adaptive management measures, and
- monitoring reporting to the City of Santa Clarita

Alternatively, mitigation for sensitive plant community impacts may be achieved through off-site restoration or enhancement at a ratio no less than 1:1 and may include the purchase of mitigation

credits at an agency- approved off-site mitigation bank or an in lieu fee program within Los Angeles County acceptable to the City.

MM-BIO-5

Jurisdictional Aquatic Resources. Before the Public Works Director, or designee, issues any grading permit for permanent or temporary impacts in the areas designated as jurisdictional features, the applicant must obtain a Clean Water Act Section 404 permit from the United States Army Corps of Engineers (USACE), a Clean Water Act Section 401 permit from the Regional Water Quality Control Board (RWQCB), and Streambed Alteration Agreement permit under Fish and Game Code Section 1602 from the California Department of Fish and Wildlife (CDFW). The following shall be incorporated into the permitting, subject to approval by the regulatory agencies:

- On- or off-site restoration or enhancement of USACE/RWQCB jurisdictional "waters of the U.S."/"waters of the State" and wetlands at a ratio no less than 2:1 for permanent impacts, and for temporary impacts, restore impact area to pre-project conditions (i.e., revegetate with native species, where appropriate). Off-site restoration or enhancement at a ratio no less than 2:1 may include the purchase of mitigation credits at an agency-approved off-site mitigation bank or in lieu fee program within Los Angeles County or within the same watershed acceptable to the City, where the location has comparable ecological parameters such as habitat types and species mix;
- On- or off-site restoration or enhancement of CDFW jurisdictional streambed and associated riparian habitat at a ratio no less than 2:1 for permanent impacts, and for temporary impacts, restore impact area to pre-project conditions (i.e., revegetate with native species, where appropriate). Off-site restoration or enhancement at a ratio no less than 2:1 may include the purchase of mitigation credits at an agency-approved off-site mitigation bank or in-lieu fee program within Los Angeles County or within the same watershed acceptable to the City, here the location has comparable ecological parameters such as habitat types and species mix.

4.3.6 Level of Significance After Mitigation

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

Special-Status Wildlife

As discussed in more detail below, with implementation of MM-BIO-1, MM-BIO-2, and MM-BIO-3, impacts to special status wildlife would be less than significant with implementation of mitigation.

Crotch Bumble Bee

MM-BIO-1 would require focused surveys for active Crotch bumble bee nests be conducted during the appropriate season for Cooper's hawk. If active nests are found during the surveys, buffers around the nests would be established and work within these buffers would be postponed or halted until the nest is vacated. Through the implementation of MM-BIO-3, impacts to Crotch bumble bee would be reduced to less than significant with implementation of mitigation.

Least Bell's Vireo

MM-BIO-2 would require protocol surveys for least Bell's vireo, consultation with CDFW and USFWS should the species be present, and permit acquisition that would include avoidance and minimization measures and potential compensatory mitigation for habitat loss, which would reduce impacts to least Bell's vireo to less than significant with implementation of mitigation.

Cooper's Hawk

MM-BIO-3 would require that pre-construction surveys for active nests be conducted during the breeding season for Cooper's hawk. If active nests are found during the surveys, buffers around the nests would be established and work within these buffers would be postponed or halted until the nest is vacated. Through the implementation of MM-BIO-3, impacts to Cooper's hawk would be reduced to less than significant with implementation of mitigation.

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

MM-BIO-4 requires either on-site or off-site restoration or enhancement of sensitive plant communities at a ratio of no less than 1:1 to mitigate for impacts to sensitive plant communities on the project site. MM-BIO-3 would reduce impacts to riparian and sensitive plant communities to less than significant with implementation of mitigation.

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

MM-BIO-5 would require on-site or off-site restoration or enhancement of USACE/RWQCB and CDFW jurisdictional waterways and aquatic resources at a ratio of at least 2:1 for permanent impacts and the restoration of impacted areas to pre-project conditions for temporary impacts. MM-BIO-4 would reduce impacts to protected waters to less than significant with mitigation incorporated.

Threshold BIO-4: Would the project 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 impedes the use of native wildlife nursery sites?

Wildlife Nurseries

MM-BIO-3 would require that pre-construction surveys for active nests be conducted during the breeding season for Cooper's hawk. If active nests are found during the surveys, buffers around the nests would be established and work within these buffers would be postponed or halted until the nest is vacated. MM-BIO-3 would reduce impacts to wildlife nurseries to less than significant with mitigation incorporated.

Threshold BIO-8: Would the project result in the disturbance of, or encroachment into, any river, river tributary, riparian habitat, stream or similar waterway identified on a United States Geological Survey map as a "blue-line" watercourse, or any waterway otherwise identified as a significant resource by the City of Santa Clarita?

MM-BIO-5 would require on-site or off-site restoration or enhancement of USACE/RWQCB and CDFW jurisdictional waterways and aquatic resources at a ratio of at least 2:1 for permanent impacts and the restoration of impacted

areas to pre-project conditions for temporary impacts. As such, potential impacts would be reduced to less than significant with mitigation incorporated.

Threshold BIO-9: Would the project result in the disturbance of any habitat known or suspected to contain a plant or animal species listed as endangered on such Federal and/or State lists?

Special-Status Wildlife

As previously discussed, MM-BIO-1, MM-BIO_2, and MM-BIO-3 would reduce impacts to special-status wildlife to less than significant with implementation of mitigation.

Crotch Bumble Bee

MM-BIO-1 would require focused surveys for active Crotch bumble bee nests be conducted during the appropriate season for Cooper's hawk. If active nests are found during the surveys, buffers around the nests would be established and work within these buffers would be postponed or halted until the nest is vacated. Through the implementation of MM-BIO-3, impacts to Crotch bumble bee would be reduced to less than significant with implementation of mitigation.

Least Bell's Vireo

MM-BIO-2 would require protocol surveys for least Bell's vireo, consultation with CDFW and USFWS should the species be present, and permit acquisition that would include avoidance and minimization measures and potential compensatory mitigation for habitat loss, which would reduce impacts to least Bell's vireo to less than significant with implementation of mitigation.

Cooper's Hawk

MM-BIO-3 would require that pre-construction surveys for active nests be conducted during the breeding season for Cooper's hawk. If active nests are found during the surveys, buffers around the nests would be established and work within these buffers would be postponed or halted until the nest is vacated. Through the implementation of MM-BIO-3, impacts to Cooper's hawk would be reduced to less than significant with implementation of mitigation.

4.3.7 Cumulative Effects

The proposed project would result in less-than-significant impacts on the local tree preservation ordinance and wildlife movement. The proposed project would have no impact on special-status plants, conflicts with a local habitat conservation plan, and a local SEA. The project would result in potentially significant impacts on special-status wildlife, wildlife nurseries, sensitive natural communities, and protected waters. However, with mitigation measures identified and defined above, these potentially significant impacts would be reduced to less-than-significant levels.

Cumulative projects identified in Chapter 3, Project Description, that would occur on previously undeveloped land would be required to identify and mitigate any potentially significant impacts on biological resources. Projects that would occur on previously developed land or in a highly urbanized area would have less potential to significantly impact biological resources; however, there is a potential for nesting birds to be present in ornamental landscaping or on existing buildings. The combined construction of projects within the vicinity of the proposed project could

deprive some species of a significant amount of habitable space. However, it is anticipated that species that are potentially affected by related projects would also be subject to the same requirements of CEQA as the project. These determinations would be made on a case-by-case basis and the effects of cumulative development on wildlife would be mitigated to the extent feasible in accordance with CEQA and other applicable legal requirements.

Therefore, for the reasons described above, cumulative adverse effects on biological resources would be **less than significant.** The combined impact of the project and other projects is insignificant, and the project's incremental effect is not cumulatively considerable.

4.3.8 References Cited

16 USC 703-712. Migratory Bird Treaty Act, as amended.

16 USC 1531-1544. Endangered Species Act, as amended.

California Fish and Game Code, Section 1600–1616. Division 2: Department of Fish and Game, Chapter 6: Fish and Wildlife Protection and Conservation.

California Fish and Game Code, Sections 3500-3516. Division 4: Birds and Mammals, Part 2: Birds.

California Fish and Game Code, Section 4700. Fully Protected Mammals.

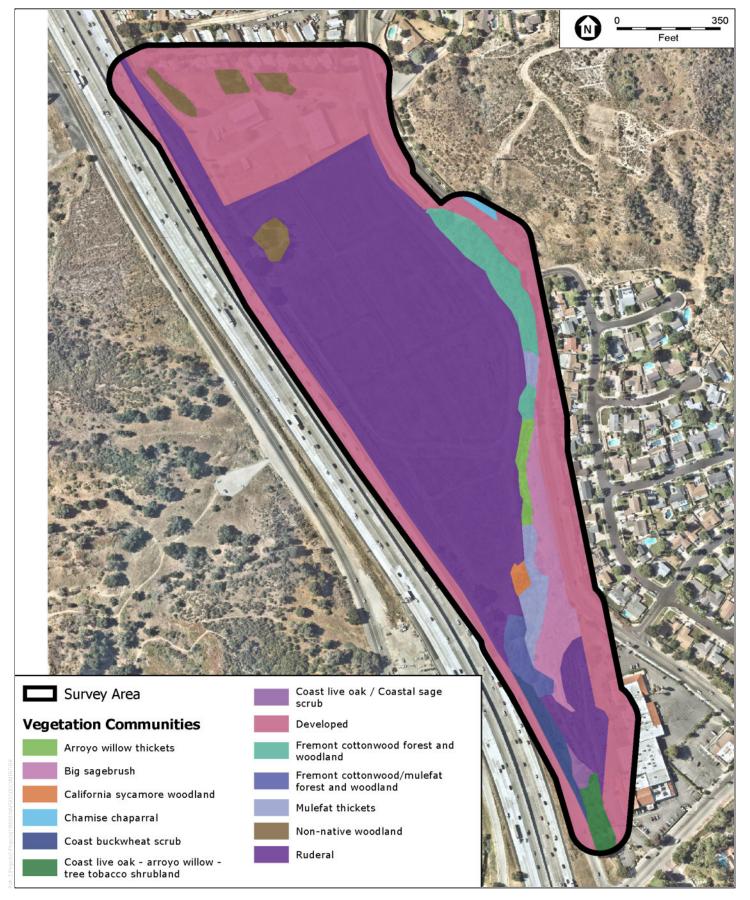
California Fish and Game Code, Section 5050. Fully Protected Reptiles and Amphibians.

- CDFW (California Department of Fish and Wildlife. 2019. "California Natural Community List." November 8, 2019. Accessed March 2020.https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=153398&inline.
- CDFW. 2020. California Natural Diversity Database (CNDDB). RareFind 5.2.14 (Commercial Subscription). Sacramento, California: CDFW, Biogeographic Data Branch. Accessed March 2020. https://map.dfg.ca.gov/rarefind/view/RareFind.aspx.
- City of Santa Clarita. 2005. Local Guidelines and Procedures for Implementation of the Provisions of the California Environmental Quality Act as Adopted by City Council for the City of Santa Clarita Pursuant to Resolution 05-38 on April 26, 2005.
- City of Santa Clarita. 2011a. City of Santa Clarita General Plan, Conservation and Open Space Element. Accessed June 11, 2019. https://www.codepublishing.com/CA/SantaClarita/html/SantaClaritaGP/6%20-%20Conservation%20and%20Open%20Space%20Element.pdf.
- CNPS (California Native Plant Society). 2020. Inventory of Rare and Endangered Plants (online edition, v8-03 0.45). Sacramento, California: California Native Plant Society. Accessed March 2020. https://www.rareplants.cnps.org.
- Los Angeles Audubon. 2009. Western Tanager (publication) Los Angeles County's Sensitive Bird Species.

 Accessed June 2020. https://planning.lacounty.gov/site/sea/wp-content/uploads/2018/08/LA-Countys-Sensitive-Bird-Species.pdf.

- NRCS (Natural Resources Conservation Servicesthe I ca). 2018. Official Soil Series Descriptions. Accessed June 11, 2019. https://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/survey/geo/?cid=nrcs142p2_053587.
- NRCS. 2020. Web Soil Survey. June 15, 2020. Accessed June 15, 2020. http://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx.
- Sawyer, John O., T. Keeler-Wolf, and J. Evans. 2009. *A Manual of California Vegetation, Second Edition.*Sacramento: California Native Plant Society.
- Santa Clarita Valley Groundwater Sustainability Agency. 2022. Santa Clara River Valley East Groundwater Subbasin- The Connection Between Groundwater & Surface Water. Accessed October 2022. https://scvgsa.org/wp-content/uploads/2020/07/SCVGSA_WS4_GSurface_handout_draft_v1.4.pdf.
- South Coast Wildlands. 2008. "South Coast Missing Linkages: A Wildland Network for the South Coast Ecoregion." South Coast Wildlands. Accessed July 15, 2019. http://www.scwildlands.org.
- SWRCB (State Water Resources Control Board). 2019. State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State. Adopted April 2, 2019. Accessed May 2022. https://www.waterboards.ca.gov/water_issues/programs/cwa401/docs/procedures_conformed.pdf.

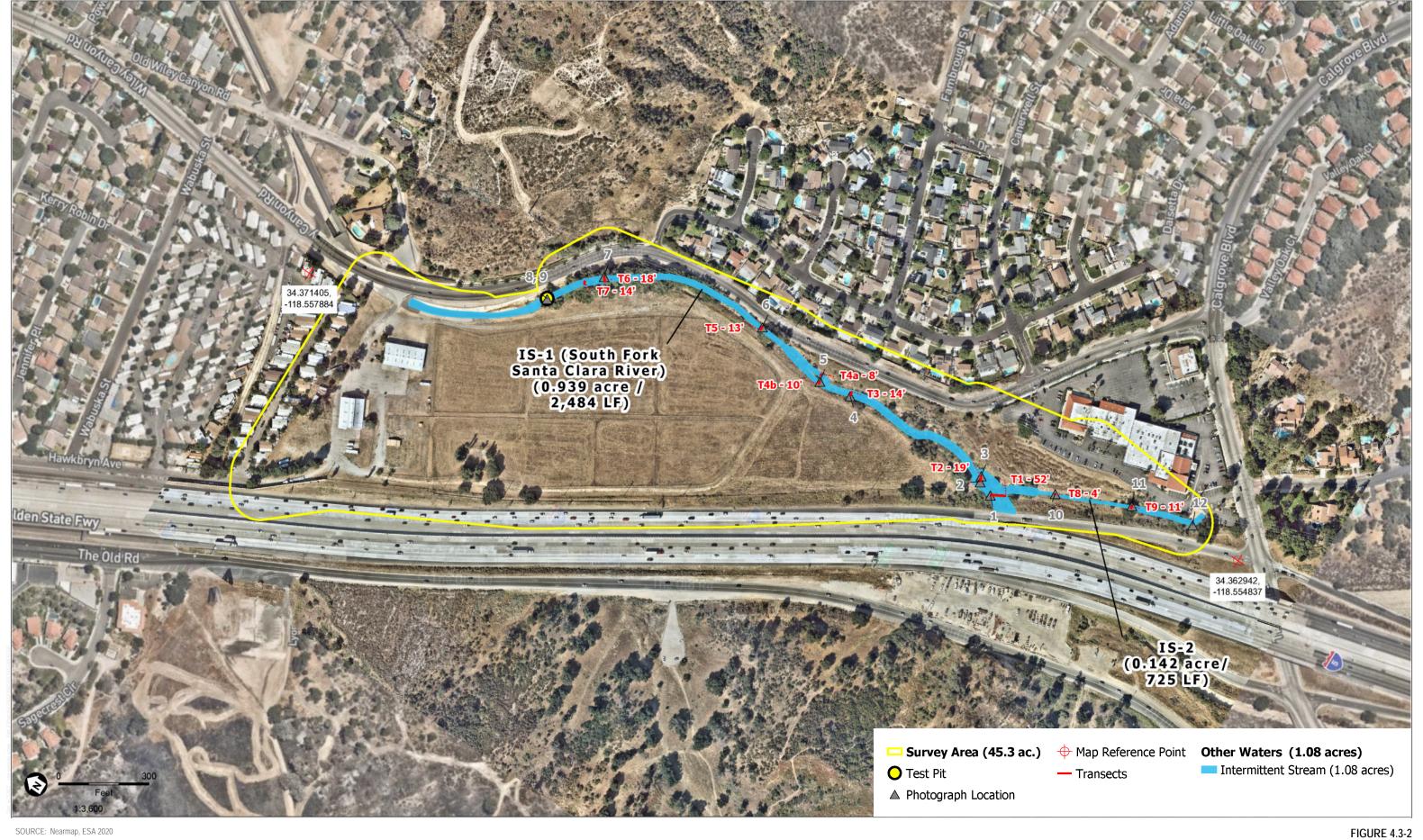
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SOURCE: NearMap, ESA 2020

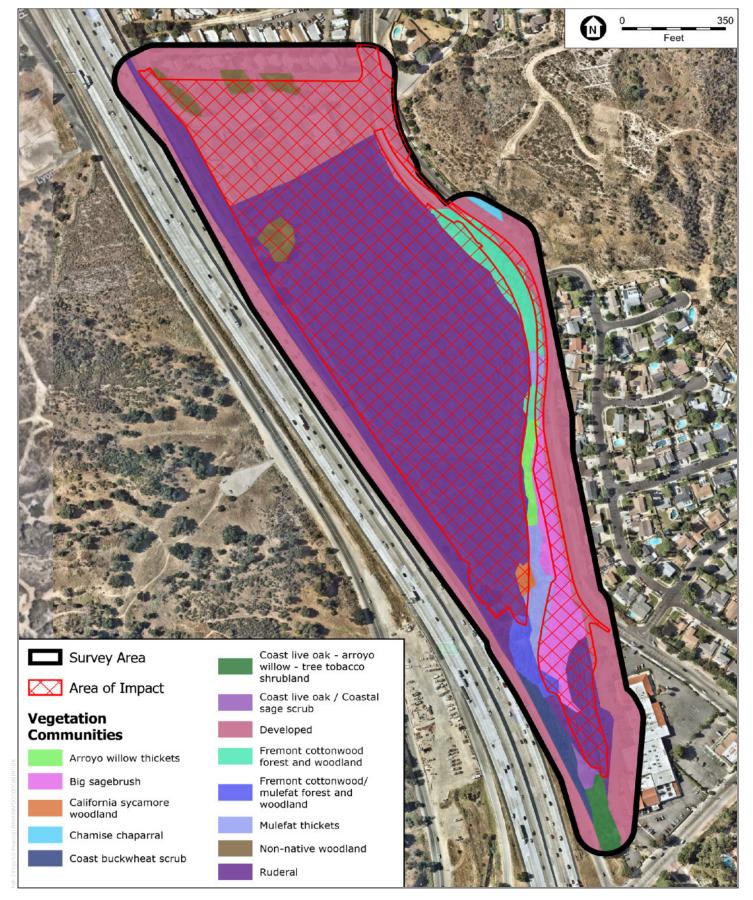
FIGURE 4.3-1
Vegetation Communities and Land Cover

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SOURCE: NearMap, ESA 2020

FIGURE 4.3-3

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4.4 Cultural Resources

This section discusses potential impacts to historical resources, archaeological resources, and human remains, resulting from implementation of the proposed Wiley Canyon Mixed Use Project, City of Santa Clarita, California (project).

The analysis is based on a review of existing cultural resources; technical data; and applicable laws, regulations, and guidelines and is derived from the Cultural Resources Assessment Report prepared by ESA in May 2022 (Appendix D of this Environmental Impact Report [EIR]).

As discussed in Chapter 3, Project Description, of this EIR, the proposed project site consists of approximately 31.8 acres of vacant land proposed for redevelopment. The project proposes separating the existing property into six separate lots (ranging in size from 31,011 square feet (0.71 acres) to 356,007 square feet (8.1 acres)) and the redevelopment of existing vacant land with a new mixed-use development consisting of the following components:

- 277,108-square-foot senior living facility
- 8,914 square feet of commercial space
- 379 multifamily residential units
- Publicly accessible outdoor recreational field space, including 1.3 miles of pedestrian and bike trails
- Off-site circulation improvements (e.g., new roundabouts, traffic signals, Class I and II bike lanes on Wiley Canyon Road and Calgrove Boulevard, and pedestrian trails).

4.4.1 Environmental Setting

The project site is located on the southern margin of the Santa Clarita Valley within the Transverse Ranges geomorphic province of California, which is characterized by east-west trending mountains and faults. The Santa Clarita Valley is bounded by the San Gabriel Mountains to the east and southeast, the Santa Susana Mountains to the southwest, the Topatopa and Piru Mountains to the north and northwest, and the Sierra Pelona Mountains to the northeast. The project site is located in the Upper Santa Clara River East Subbasin hydraulic area. Surface water is drained by the Santa Clara River, Bouquet Creek, and Castaic Creek (Santa Clarita Valley Groundwater Sustainability Agency 2022). The South Fork of the Santa Clara River, located on the eastern margin of the project site, leads to the Santa Clara River approximately 3.75 miles northeast of the project site. Native vegetation in the Santa Clarita Valley historically consisted of coastal sage scrub, riparian woodlands, and freshwater marsh habitats (City of Santa Clarita 2012).

The surficial geology of the project site primarily consists of Holocene-age (approximately < 10,000 years old) undifferentiated alluvial deposits; however, the project site's northwestern corner is comprised of hills and is mapped as the Late Pliocene to the Early Pleistocene (3.6 to 1.8 million years ago) Saugus Formation. The undifferentiated alluvial deposits were transported to the project site via the south fork of the Santa Clara River from the Santa Susana Mountains. A review of the geotechnical studies that address the project site indicate that the alluvial deposits extend to a depth of approximately 65 to 75 feet below surface, where it is in contact with Saugus Formation bedrock (LGC Valley 2007a; Seward 2018). The portions of the project site mapped as undifferentiated alluvial deposits have high potential for the presence of buried archaeological materials given that

the age of these deposits encompass the entirety of the region's human occupation and that buried soil profiles may be present within these deposits at depths ranging from 41 to 58 inches.

Soils within the project site primarily consists of the Yolo series; however, the northeastern corner of the project site consists of the Saugus series. The Yolo soils are formed in alluvium from mixed rocks and are found on alluvial fans and flood plains and includes buried soil profiles (anthrosols), which are past landforms that may have been occupied by prehistoric peoples and subsequently sealed by deposits of more recent alluvium. The Saugus soils occur on steep slopes at elevations of 600 to 2,500 feet with slopes ranging from 9 to 50 percent, and are subject to erosion and are therefore, not conducive for the preservation of archaeological deposits.

Existing Conditions

The project site consists of approximately 31.8 acres of vacant land located at 24924 Hawkbryn Avenue, within the Newhall area of the City of Santa Clarita (City) including Assessor Parcel Numbers (APNs): 2825-012-007, 2825-012-010, 2825-012-011, 2825-012-901, and 2825-012-902. Specifically, the project site is located in Township 3 North, Range 16 West, Sections 4, 9, and 10, as shown on the U.S. Geological Survey 7.5-minute Oat Mountain Quadrangle topographic map.

The project site is currently vacant except for two single-story metal buildings, two mobile homes, former mule barns, and one drained, man-made water basin associated with the former Smiser Mule Ranch which historically occupied the site.

As identified in ESA Cultural Resources Assessment Report (2022) prepared for the project site, the northern portion of the site has been historically used as a mule ranch and pastureland. Two on-site structures consist of approximately 6,750 square feet and approximately 9,380 square feet in size, both with steel frames on reinforced concrete slab foundations with metal roofing and metal exterior walls constructed in 1978 and 1980, respectively (Appendix D). Historic uses of the Smiser Mule Ranch include ranch operations and on-site residences. The project site was last used as a woodshop for furniture and cabinet manufacturing within the existing metal buildings and is currently used for recreational vehicle (RV) and boat storage.

The northeastern portion of the project site, east of Wiley Canyon Road, consists of vacant land on an elevated hillside. This portion of the site is improved with an existing retaining wall and dirt roadways that provide access for an existing easement owned and maintained by the Los Angeles County Public Works, Flood Control District to accommodate drainage flow associated with the South Fork of the Santa Clara River.

Prehistoric Setting

The chronology of Southern California is typically divided into three general time periods: the Early Holocene (9,600 cal B.C. to 5,600 cal B.C.), the Middle Holocene (5,600 cal B.C. to 1,650 cal B.C.), and the Late Holocene (1,650 cal B.C. to cal A.D. 1769). This chronology is manifested in the archaeological record by particular artifacts and burial practices that indicate specific technologies, economic systems, trade networks, and other aspects of culture.

While it is not certain when humans first came to California, their presence in Southern California by about 9,600 cal B.C. is well documented. At Daisy Cave, on San Miguel Island, cultural remains have been radiocarbon dated to between 9,150 and 9,000 cal B.C. (Byrd and Raab 2007). During the Early Holocene (9,600 cal B.C. to 5,600 cal B.C.), the climate of Southern California became warmer and more arid and the human populations, who were

represented by small hunter gathers until this point and resided mainly in coastal or inland desert areas, began exploiting a wider range of plant and animal resources (Byrd and Raab 2007).

During the Late Holocene (1,650 cal B.C. to cal A.D. 1769), many aspects of Millingstone culture, as defined below, persisted, but a number of socioeconomic changes occurred (Erlandson 1994; Wallace 1955; Warren 1968). The native populations of Southern California were becoming less mobile and populations began to gather in small sedentary villages with satellite resource-gathering camps. Increasing population size necessitated the intensified use of existing terrestrial and marine resources (Erlandson 1994). Evidence indicates that the overexploitation of larger, high ranked food resources may have led to a shift in subsistence, towards a focus on acquiring greater amounts of smaller resources, such as shellfish and small-seeded plants (Byrd and Raab 2007). Between about A.D. 800 and A.D. 1350, there was an episode of sustained drought, known as the Medieval Climatic Anomaly (MCA) (Jones et al. 1999). While this climatic event did not appear to reduce the human population, it did lead to a change in subsistence strategies in order to deal with the substantial stress on resources.

Given the increasing sedentism and growing populations during the Late Holocene, territorial conscription and competition became acute. Primary settlements or village sites were typically established in areas with available freshwater, and where two or more ecological zones intersected (McCawley 1996). This strategic placement of living space provided a degree of security in that when subsistence resources associated with one ecological zone failed, the resources of another could be exploited (McCawley 1996). Villages typically claimed and carefully defended fixed territories that may have averaged 30-square miles in size encompassing a variety of ecological zones that could be exploited for subsistence resources (McCawley 1996).

The Late Holocene marks a period in which specialization in labor emerged, trading networks became an increasingly important means by which both utilitarian and non-utilitarian materials were acquired, and travel routes were extended. Trade during this period reached its zenith as asphaltum (tar), seashells, and steatite were traded from Catalina Island (Pimu or Pimugna) and coastal Southern California to the Great Basin. Major technological changes appeared as well, particularly with the advent of the bow and arrow sometime after cal A.D. 500, which largely replaced the use of the dart and atlatl (Byrd and Raab 2007).

Early Millingstone Period (or Early Horizon Period)

Most sites of the 7,500 to 5,000 B.P. interval, or Early Millingstone Period (or Early Horizon Period), date between 8,500 and 3,500 years in age, and are dominated by assemblages containing large numbers of groundstone artifacts, along with crude choppers and other core/cobber tools. These are thought to represent an adaptation to gathered foods, particularly a reliance on hard-shelled seeds. In addition, J. Erlandson has shown that they were generalized foragers during the beginning of this period that relied on a variety of different kinds of terrestrial, coastal and marine resources, that they were adapted to estuarine embayments, and that their primary protein sources were shellfish and other marine resources. Erlandson's evidence suggests that the adaptation to the seashore is a very ancient and long-lived tradition in local prehistory.

Intermediate (or Middle) Period

The 5,000 to 1,500 B.P. interval, or the Intermediate (or Middle) Period, occurred about 3,500 years ago, and is believed to have lasted until about 1000 Common Era (C.E.). This time period is marked on the coast by a growing exploitation of marine resources, the appearance of the hopper mortar and stone bowl/mortar, and a diversification and an increase in the number of chipped stone tools. Projectile points, in particular, are more common at sites than previously, while artifacts such as fish hooks and bone gorges also appear. There is substantial evidence,

moreover, that it was at the beginning of this time period that inland sites were first established and occupied, suggesting the exploitation of more varied environments and perhaps an increase in population, and also a movement of coastal sites down towards the beaches.

Late Prehistoric Period

The introduction of the bow and arrow for hunting marked the beginning of this time period in southern California coastal regions, dating from about 1,500 B.P. (500 C.E.) to the time of Spanish contact (approximately 1769 C.E.). Coastal sites dating to this period are numerous, and contain diagnostic artifacts such as small triangular projectile points, mortars and pestles, steatite ornaments and containers, perforated stones, circular shell fishhooks, and numerous and varied bone tools, as well as bone and shell ornamentation. The transition to the Late Prehistoric Period was thus marked by the evolution and eventual dominance of a sophisticated maritime economy. More importantly, it is during this time period that one can correlate local prehistory with Chumash society, a group of Hokan speaking people who occupied the Santa Clara River Valley before the Spanish colonization."]

Historic Setting

Spanish Period (1769-1821)

Although Spanish explorers made brief visits to the region in 1542 and 1602, sustained European exploration of southern California began in 1769, when Gaspar de Portolá and a small Spanish contingent began their exploratory journey along the California coast from San Diego to Monterey. This was followed in 1776 by the expedition of Father Francisco Garcés (Johnson and Earle 1990). In the late 18th century, the Spanish began establishing missions in California with the intent to relocated and convert native peoples. In 1797, Father Fermín Francisco de Lasuén founded the Mission San Fernando Rey de España, located approximately 8.25 miles southeast of the project site (California Missions Resource Center 2018). Disease and hard labor took a toll on the native population in California; by 1900, the Native Californian population had declined by as much as 90 percent (Cook 1978). In addition, native economies were disrupted, trade routes were interrupted, and native ways of life were significantly altered. In an effort to promote Spanish settlement of Alta California, Spain granted several large land concessions from 1784 to 1821. At this time, unless certain requirements were met, Spain retained title to the land (State Lands Commission 1982).

Mexican Period (1821–1846)

The Mexican Period began when Mexico won its independence from Spain in 1821. Mexico continued to promote settlement of California with the issuance of land grants. In 1833, Mexico began the process of secularizing the missions, reclaiming the majority of mission lands and redistributing them as land grants. According to the terms of the Secularization Law of 1833 and Regulations of 1834, at least a portion of the lands would be returned to the Native populations, but this did not always occur (Milliken et al. 2009). Many ranchos continued to be used for cattle grazing by settlers during the Mexican Period. Hides and tallow from cattle became a major export for Californios, many of whom became wealthy and prominent members of society. The Californios led generally easy lives, leaving the hard labor to vaqueros and Indian laborers (Pitt 1994; Starr 2007).

American Period (1846-present)

In 1846, the Mexican-American War broke out. Mexican forces were eventually defeated in 1847 and Mexico ceded California to the United States as part of the Treaty of Guadalupe Hildalgo in 1848. Following a brief period as an

independent Republic, California was admitted as a state in the United States in 1850. While the Treaty of Guadalupe Hildalgo recognized right of Mexican citizens to retain ownership of land granted to them by Spanish or Mexican authorities, the claimant was required to prove their right to the land before a patent was given. The process was lengthy, and generally resulted in the claimant losing at least a portion of their land to costs associated with proving ownership (Starr 2007). When the discovery of gold in northern California was announced in 1848, a huge influx of people from other parts of North America flooded into California. The increased population provided an additional outlet for the Californios' cattle. As demand increased, the price of beef skyrocketed and Californios reaped the benefits. However, a devastating flood in 1861, followed by droughts in 1862 and 1864, led to a rapid decline of the cattle industry; over 70 percent of cattle perished during these droughts (McWilliams 1946; Dinkelspiel 2008). This event, coupled with the burden of proving ownership of their lands, caused many Californios to lose their lands during this period (McWilliams 1946). Former ranchos were subsequently subdivided and sold for agriculture and residential settlement. The first transcontinental railroad was completed in 1869, connecting San Francisco with the eastern United States. Newcomers poured into northern California. Southern California experienced a trickle-down effect, as many of these newcomers made their way south. The Southern Pacific Railroad extended this line from San Francisco to Los Angeles in 1876. The second transcontinental line, the Santa Fe, was completed in 1886 and caused a fare war, driving fares to an unprecedented low. Settlers flooded into the region and the demand for real estate skyrocketed. As real estate prices soared, land that had been farmed for decades outlived its agricultural value and was sold to become residential communities. The subdivision of the large ranchos took place during this time (Meyer 1981; McWilliams 1946).

History of the Project Site

During the Spanish period, the project site and its surrounding area were used by Mission San Fernando for cattle grazing. Mission San Fernando established an estancia, named San Francisco Xavier, whose purpose was to provide grazing land for the mission's cattle. The headquarters of the estancia was built in 1804 at the confluence of the Santa Clara River and Castaic Creek, approximately 6 miles north of the project site. The headquarters buildings consisted of two rectangular adobe structures, with a third adobe structure later constructed downhill from the main structures (Santa Clarita Valley Historical Society 2012). After the secularization of the missions, Governor Alvarado deeded the 48,612-acre Rancho San Francisco land grant to Lieutenant Antonio del Valle in 1839, who then moved into the former estancia buildings. Following del Valle's death in 1841, the land was divided between his second wife and their children, and Ygnacio, his son from his first marriage (Triem and Stone 1996: Willey 1886). The following year, gold was discovered in Placerita Canyon, located approximately 2.5 miles west of the project site. This sparked a minor gold rush, with people coming from as far away as the Mexican State of Sonora to mine gold (Los Angeles Times 1998; McIntyre 1990). In 1865, Ygnacio del Valle was forced to sell off a large portion of his land holdings in order to pay off debts incurred due to flooding and droughts. The lands were sold to the Philadelphia and California Petroleum Company, who began drilling for oil. Unsuccessful in their efforts to locate oil, the company sold Rancho San Francisco in 1875 to Henry Mayo Newhall, who raised cattle and cultivated wheat and barley on the land (McIntyre 1990). Newhall located his ranching headquarters adjacent to the old Estancia de San Francisco Xavier. Upon Newhall's death in 1883, the rancho was passed on to his descendants, who incorporated the Newhall Land and Farming Company and used much of the land in Rancho San Francisco, including lands around the project site, for agricultural purposes, primarily the cultivation of citrus trees (Newhall Foundation 2011). Land use specific to the project site appears to have centered on agricultural activities. The project site may have been owned by the Newhall Dairy Farms in the late 1940s and early 1950s. The dairy pasteurized, bottled, and delivered milk throughout Santa Clarita (Santa Clarita Valley Historical Society 2012.). The Newhall Dairy Farms appears to have incorporated in 1946 and was in business until 1952, at which point their operations appeared to have ceased, and their land was used by a traveling circus during the winter months (Appendix H-2a). The dairy's milk barns and pasteurizing and bottling facilities do not appear to have existed within the project site; rather, it may be that the project site was used as pasturage for the dairy's cattle. By the late 1970s the property was purchased by Samuel Lee Smiser, president of the Smiser Freight trucking company, and became the home of a mule ranch (Appendix H-2a). Smiser constructed warehouse style barns to house his mules and equipment in 1978 and 1980 (Appendix H-2a). In 1979, Smiser hired Haven Reninger to train and manage the mules, which were the mascots of Smiser's freight company, and were used in pulling wagons and floats as part of various parades and carnivals throughout California. By 1980 the ranch had amassed a mule population of 35 strictly female mules, with a handful of smaller, riding mules, and larger 15-hand-high draft animals primarily used to haul buckboards (Appendix H-2a). Indeed, the Smiser mules traveled, won ribbons, hauled weight in competitions, and were well-known for the parades in which they were involved, often pulling parade floats (Los Angeles Times 1985). By 1994, the ranch no longer housed mules, and Smiser leased the property to a horse rescue organization (Appendix H-2a). Communities located within the Santa Clarita Valley include Saugus, Newhall, and Castaic. The City of Santa Clarita, incorporated in 1987, absorbed into its city limits the surrounding communities of Newhall, Saugus, and Valencia (City of Santa Clarita, 2012).

Background Research

California Historical Research Information System Records Search

A California Historical Research Information System (CHRIS) records search for the project site and a 1-mile radius was completed on April 15, 2020 at the South Central Coast Information Center (SCCIC). The records search included a review of all recorded cultural resources and previous studies within the project's records search area.

Previously Conducted Cultural Resource Studies

The SCCIC records indicate that 31 previous cultural resources studies have been conducted within a 1-mile radius of the project site. Of these, four (4) previous studies overlap the project site. One additional study (W&S Consultants, 2007) not on file at the SCCIC was identified and includes the entirety of the project site. Table 4.4-1, below, provides a complete list of all 31 previous cultural resources studies within 1-mile of the project site, including the study not on file with the SCCIC.

Table 4.4-1. Previous Cultural Resource Studies Within 1.0-Mile of the Project Site

Report Number	Author	Year	Report Title	Proximity to Proposed Project Site
*Not assigned	W&S Consultants	2007	Intensive Phase I Archaeological Survey of the Smiser Ranch, Santa Clarita, Los Angeles County, California	Outside
LA-00023	Leonard, Nelson N.	1974	Archaeological Reconnaissance of Tentative Tract # 31399, a Residential Development Near Newhall California	Outside
LA-00103	Singer, Clay A.	1975	Archaeological Resource Survey of Portions of the South Fork, Santa Clara River, Los Angeles County, California	Overlaps
LA-00290	Desautels, Roger J.	1976	Archaeological Survey Report on Acre Parcel of Land Located in the Newhall Area of the County of Los Angeles, California	Outside

Table 4.4-1. Previous Cultural Resource Studies Within 1.0-Mile of the Project Site

Report Number	Author	Year	Report Title	Proximity to Proposed Project Site
LA-00510	Van Horn, David M.	1979	Preliminary Archaeological Overview: a 3,000+/- Acre Parcel Bordering Potrero Canyon Near Newhall, CA	Outside
LA-00578	Baksh, Michael G.	1979	Archaeological Evaluation of Tentative Tract No.35555, Los Angeles County, California	Outside
LA-00773	Salls, Roy A.	1980	Cultural Resources Investigation of the Proposed Land Division Map Number 12292	Outside
LA-00842	Singer, Clay A.	1977	Archaeological Survey and Cultural Resource Assessment for a Portion of Towsley Canyon, Near Newhall, Los Angeles County, California	Outside
LA-01062	Schilz, Allen J.	1981	Archaeological Survey of the Sylmar Development Project Site, Los Angeles County, California	Outside
LA-01595	Brown, Robert S. and David M. Van Horn	1984	Archaeological Survey Report: a 400+ Acre Tract Located in the Santa Susana Mountains West of Newhall, California	Outside
LA-01978	Salls, Roy A.	1990	Report of Archaeological Reconnaissance Survey of Santa Clarita, California-Newhall Carrier Annex Environmental Assessment, ESA Project Number 9094c Newhall, California	Outside
LA-02305	Moratto, Michael J.	1990	Cultural and Paleontological Resources in the Santa Susana and Santa Monica Mountains, Los Angeles County, California	Outside
LA-02721	Weber, Carmen A. and Dave Ferraro	1992	Cultural Resources Survey 82.7 Acre Parcel Near Newhall Tentative Parcel Map No. 8576	Outside
LA-02848	Peak and Associates, Inc.	1992	Cultural Resource Assessment of the Proposed Newhall Alternate Alignment, Ventura and Los Angeles Counties, California	Outside
LA-02950	Anonymous	1992	Consolidated Report: Cultural Resource Studies for the Proposed Pacific Pipeline Project	Outside
LA-02951	Gibson, Robert O.	1993	Results of Archaeological Records Review for the Pacific Pipeline Project Emidio Lateral Pipeline Kern and Los Angeles Counties, CA	Outside
LA-03000	Simon, Joseph M. and David S. Whitley	1993	Phase I Archaeological Survey and Cultural Resources Assessment for the 225 Acres Alternative Site 2 Study Area, Santa Clarita, Los Angeles County, California	Outside
LA-03116	Singer, Clay A., John E. Atwood, and Shelley M. Gomes	1994	Cultural Resources Survey and Impact Assessment for a 0.25 Acre Lot Located at 24626 Apple Street in the Community of Newhall, Los Angeles County, California	Outside
LA-04008	Unknown	1996	Cultural Resources Investigation Pacific Pipeline Emidio Route	Outside

Table 4.4-1. Previous Cultural Resource Studies Within 1.0-Mile of the Project Site

Report Number	Author	Year	Report Title	Proximity to Proposed Project Site
LA-05533	Smith, Philomene C.	2000	Negative Archaeological Report: Rock-lined Section and the Addition of an Access to Paved Section of Drainage Channel Near Interstate 5 in Santa Clarita	Overlaps
LA-05855	Anonymous	2001	Phase I Archaeological Survey of the 558 Acres Old Road Study Area, Los Angeles County, California	Outside
LA-08958	Tsunoda, Koji and A. Moreno	2007	Archaeological Survey Report for Southern California Edison Company Saugus, North Oaks FO Cable Project Los Angeles County, California (W0#8456-0639, J0#6155)	Outside
LA-09062	Slawson, Dana N.	2004	Archaeological Investigation for NCWD Peachland Reservoirs: 18-Inch Pipeline and Access Road Improvements Project	Outside
LA-09063	Schmidt, June A.	2003	Negative Archaeological Survey Report: Church of the Nazarene (c.u.p. No. 03-090) 23857 The Old Road, Santa Clarita, Los Angeles County	Outside
LA-00906	Shepard, Richard S.	2004	Phase I Cultural Resource Assessment for Lyons Canyon Ranch Specific Plan, Tentative Tract Map 53653, Santa Clarita, Los Angeles County, California.	Outside
LA-10511	McKenna, Jeanette	2005	A Phase I Cultural Resources Investigation of Aidlin Casad Tract No. 52905, Approximately 95 Acres in the Lyon Canyon Area of Los Angeles County, California	Outside
LA-10578	Fortier, Jana	2009	TEA21 Rural Roadside Inventory: Native American Consultation and Ethnographic Study Caltrans District 7, County of Los Angeles	Outside
LA-11594	Bonner, Wayne	2011	Cultural Resources Records Search and Site Visit Results for AT&T Mobility, LLC Candidate NLO443-01 (Newhall Water Tank), 4750 Fambrough Street, Santa Clarita, Los Angeles County, California	Outside
LA-11985	McKenna, Jeanette	2012	A Class III/Section 106 and Phase I CEQA Cultural Resources Investigation for the Proposed Storm Drain Improvement Areas in the Newhall and Santa Clarita Areas of Los Angeles County, California	Overlaps
LA-12526	Ehringer, Candace, Katherine Ramirez, and Michael Vader	2013	Santa Clarita Valley Sanitation District Chloride TMDL Facilities Plan Project, Phase I Cultural Resources Assessment	Outside

Table 4.4-1. Previous Cultural Resource Studies Within 1.0-Mile of the Project Site

Report Number	Author	Year	Report Title	Proximity to Proposed Project Site
LA-12631	Maxon, Patrick	1999	Cultural Resources Reconnaissance of the Edson (TT 52905) Parcels; Portions of the Aidlin Properties, in the City of Santa Clarita, Los Angeles County, California	Outside
LA-13109	McKenna, Jeanette	2015	A Class III/Section 106 and Phase I CEQA Cultural Resources Investigation for the Proposed Storm Drain Improvement Areas in the Newhall and Santa Clarita Areas of Los Angeles County, California	Overlaps

Notes: * = not on file at the SCCIC and therefore, no report number available.

Previously Recorded Cultural Resources

The records search results indicate nine cultural resources have been previously recorded within a 1-mile radius of the project site. Of these, one is a prehistoric archaeological site; two are historic-period archaeological sites; four are historic built environment resources; one is a prehistoric isolate; and one is a historic-period isolate. No cultural resources were previously recorded within or immediately adjacent to (within 200 feet of) the project site. Table 4.4-2, below, provides a summary of all nine previously recorded cultural resources within 1 mile of the project site.

Table 4.4-2. Previously Recorded Cultural Resources Within 1.0-Mile of the Project Site

Primary Number (P-19-)	Trinomial (CA-LAN-)	Resource Type and Age	Description	Year Recorded	NRHP/CRHR Status
000802	000802	Archaeological Site: Prehistoric	Lithic scatter	1977	Not evaluated
004424	_	Archaeological Site: Historic-period	Remnants of well	2014	Not evaluated
100356	_	Built Environment: Historic	Wooden bridge	1989	Not evaluated
100358	_	Archaeological Site: Historic-period	Remnants of well	1989	Not evaluated
101201	_	Built Environment: Historic	Gas line marker	2014	Not evaluated
101350	_	Archaeological Isolate: Prehistoric	Hammerstone	2015	Not evaluated
101351	_	Archaeological Isolate: Historic-period	Bottle finish	2015	Not evaluated
120065	_	Built Environment: Historic	Wooden livestock corral	1989	Not evaluated
192297	_	Built Environment: Historic	Check dam	2015	Determined ineligible

Notes: NRHP = National Register of Historic Places; CRHR = California Register of Historical Resources.

Historic Aerial Review

The following section is taken from the ESA 2022 report, pgs. 23-24 (edits for the purposes of this EIR chapter are in brackets):

Historic maps and aerial photographs were examined to provide historic information about land uses of the APE [Project site for purposes of this document] and to contribute to an assessment of the [project site]'s archaeological sensitivity. Available topographic maps include the 1903 and 1941 Santa Susanna 15-minute quadrangles, the 1929 and 1933 Newhall 7.5-minute quadrangles, and the 1952 Oak Mountain 7.5-minute quadrangle. Historic aerial photographs were available for the years 1947, 1959, 1969, 1972, 1977, 1980, 1994, 2005, and 2016 (NETR 2020).

The available historic maps and aerial photographs indicate the [project site] has largely been used for agricultural purposes through the present, and its vicinity remained largely rural through the 1960s when suburban development began to encroach into the areas bounding the [project site]. The 1903 map shows a north-south oriented road corresponding to present-day Wiley Canyon Road bounding the [project site's] eastern margin and a north-south oriented ephemeral stream bisecting the center of the [project site]. The 1929, 1933, 1941, and 1952 maps show the generally north-south oriented Highway 99 bounding the [project site's] western margin.

The historic aerial photographs largely reflect what is depicted in the topographic maps in that the [project site] and its immediate vicinity were largely used for agricultural purposes during the mid-20th century, but by the 1960s suburban development began to encroach into the [project site's] vicinity. The 1947 and 1959 photographs show the [project site] as open fields bounded by Highway 99 to the west and Wiley Canyon Road to the east. The 1969 photograph shows a residential subdivision and a mobile home park being constructed southeast and north of the [project site], respectively. The 1972 and 1977 photographs show the mobile home park was extended south to the [project site's] northern margin.

The 1980 aerial photograph shows two warehouse-type buildings in the northern portion of the [project site] and a small stock pond along the [project site's] northwestern margin. The 1994, 2005, and 2016 aerial photographs show the [project site's] present layout which consists of open fields in its central and southern portions, and warehouse buildings in the northern portion.

In sum, the historic map and aerial review indicate the [project site] and its vicinity were largely used for agricultural purposes until the 1960s when suburban development began to encroach along the [project site's] margins. Aerial photographs show that between 1977 and 1980 two warehouse structures were constructed in the [project site's] norther[n] portion and a stock pond was established along the [project site's] northwestern margin, all of which are extant.

Native American Coordination

Sacred Lands File Search and Tribal Outreach

ESA contacted the Native American Heritage Commission (NAHC) on January 23, 2020, requesting a review of the Sacred Lands File (SLF) for the project site. In a response received on February 6, 2020, the NAHC stated that the

results of the SLF search were negative for known cultural resources. The NAHC also provided a list of 15 Native American groups and/or individuals who may have knowledge of cultural resources in the project site. On March 10, 2020, ESA sent letters via certified mail to each representative to solicit information on Native American cultural resources in the vicinity of the project site. Follow-up phone calls were conducted on March 17 and 31, 2020 followed by follow-up emails sent on April 6, 2020. This outreach was conducted for informational purposes only and did not constitute formal government-to-government consultation as specified by Assembly Bill 52, which is discussed in Chapter 4.17 Tribal Cultural Resources of this EIR. Table 4.4-3, below, summarizes the results of the Native American outreach efforts completed by ESA.

Table 4.4-3. Summary of Outreach with Native American Heritage Commission-Listed Native American Contacts

Native American Tribal Representatives	Method of Notification/Date	Response Received
Julie Tumamait-Stenslie, Chairperson Barbareño/Ventureño Band of Mission Indians	Certified mail: March 10, 2020 First Phone Call: March 17, 2020 Second Phone Call: March 31, 2020 Email: April 6, 2020	Called number, no option to leave voicemail. No response to date.
Julio Quair, Chairperson Chumash Council of Bakersfield	Certified mail: March 10, 2020 First Phone Call: March 17, 2020 Second Phone Call: March 31, 2020 Email: April 6, 2020	Called number, no option to leave voicemail. No response to date.
Gino Altamirano, Chairperson Coastal Band of the Chumash Nation	Certified mail: March 10, 2020 Email: April 6, 2020	No response to date.
Rudy Ortega, Tribal President Fernandeño Tataviam Band of Mission Indians	Certified mail: March 10, 2020 First Phone Call: March 17, 2020	Spoke with Jairo Avila.
Jairo Avila, Tribal Historic and Cultural Preservation Officer Fernandeño Tataviam Band of Mission Indians	Certified mail: March 10, 2020 First Phone Call: March 17, 2020	Mr. Avila responded in an email dated April 8, 2020 stating that resources are in the vicinity of the project. Mr. Avila also mentioned that the tribe would like to consult.
Andrew Salas, Chairperson Gabrieleno Band of Mission Indians - Kizh Nation	Certified mail: March 10, 2020 First Phone Call: March 17, 2020	Chairperson Salas responded via email on March 17, 2020 requesting consultation.

Table 4.4-3. Summary of Outreach with Native American Heritage Commission-Listed Native American Contacts

Native American Tribal Representatives	Method of Notification/Date	Response Received
Anthony Morales, Chairperson Gabrieleno/Tongva San Gabriel Band of Mission Indians	Certified mail: March 10, 2020 First Phone Call: March 17, 2020 Second Phone Call: March 31, 2020	Spoke with Mr. Morales who stated the project is near natural habitat and is, therefore, considered to be culturally and spiritually sensitive. As such, Mr. Morales recommended Native American and archaeological monitoring and that the tribal council be contacted at the start of project ground disturbance.
Sandonne Goad, Chairperson Gabrielino /Tongva Nation	Certified mail: March 10, 2020 First Phone Call: March 17, 2020 Second Phone Call: March 31, 2020 Email: April 6, 2020	Left voicemail. No response to date.
Robert Dorame, Chairperson Gabrielino Tongva Indians of California Tribal Council	Certified mail: March 10, 2020 First Phone Call: March 17, 2020	Spoke with Mr. Dorame who recommended that the Gabrielino Tongva Indians of California Tribal Council's Treatment Plan and Monitoring Recommendations be followed during project construction.
Charles Alvarez, Tribal Chairman Gabrielino-Tongva Tribe	Certified mail: March 10, 2020 First Phone Call: March 17, 2020	Spoke with Mr. Alvarez who recommended archival research and a survey be conducted and that the results be included in a technical report.
Fred Collins, Spokesperson Northern Chumash Tribal Council	Certified mail: March 10, 2020 First Phone Call: March 17, 2020 Second Phone Call: March 31, 2020 Email: April 6, 2020	Left voicemail. No response to date.

Table 4.4-3. Summary of Outreach with Native American Heritage Commission-Listed Native American Contacts

Native American Tribal Representatives	Method of Notification/Date	Response Received
Mark Vigil, Chief San Luis Obispo County Chumash Council	Certified mail: March 10, 2020 First Phone Call: March 17, 2020 Second Phone Call: March 31, 2020 Email: April 6, 2020	Phone number is no longer in use. No response to date.
Kenneth Kahn, Chairperson Santa Ynez Band of Chumash Indians	Certified mail: March 10, 2020 First Phone Call: March 17, 2020 Second Phone Call: March 31, 2020 Email: April 6, 2020	In an email dated April 16, 2020, Cultural Resources Coordinator, Freddie Romero, stated Santa Ynez defers to the FTBMI.
Mona Tucker, Chairperson yak tityu yak tiłhini – Northern Chumash Tribe	Certified mail: March 10, 2020 First Phone Call: March 17, 2020 Second Phone Call: March 31, 2020	Ms. Tucker defers to tribal groups in closer proximity to project area.
Donna Yocum, Chairperson San Fernando Band of Mission Indians	Certified mail: March 10, 2020 First Phone Call: March 17, 2020 Second Phone Call: March 31, 2020 Email: April 6, 2020	Left voicemail. No response to date.

Cultural Resource Survey

Field Methods

ESA completed a cultural resources survey of the project site on July 24, 2020. Areas with visible ground surface were subject to pedestrian survey using transect intervals spaced no more than 10 meters (approximately 30 feet) apart and were typically limited to existing dirt roads and trails, on-site ephemeral drainage, areas around existing buildings, and areas along the paved road shoulders. All areas containing accessible boulders and exposed ground surfaces around them were examined for surface artifacts, rock art, and bedrock milling features. ESA employed an opportunistic survey strategy in areas with slopes greater than 30 percent or thick vegetation, which consisted of intensively examining available clear patches of soil (e.g., animal trails).

Survey Results

The results of the ESA survey were that the majority of the project site is heavily disturbed by previous development, previous agricultural uses including the two existing warehouses and stock pond, the construction of Wiley Canyon Road, and erosion from a north-south trending ephemeral drainage within the project site. Ground visibility was generally poor (rated as 0-50% visibility) in the majority of the project site, as the majority of the project site is densely vegetated with tall grasses and riparian vegetation. ESA employed the opportunistic survey approach in approximately 20% of the riparian areas, and the remaining 80% was not surveyed. In densely vegetated areas, the same approach was used and 40% was surveyed opportunistically, and the remaining 60% of the densely vegetated areas were surveyed using a combination of systematic and opportunistic approaches. The areas with the best visibility (rated as 50-100% visibility) include dirt roads, trails, and areas along the shoulders of existing paved roads and were systematically surveyed. Due to steep slopes and locked gates, the northeastern corner of the APE [Project site for purposes of this document], east of Wiley Canyon Road, was not surveyed. No cultural resources were identified as a result of the survey.

The 2020 ESA survey did not survey for historical built environment resources. Existing buildings on-site are listed as "warehouses" constructed in 1978 and 1980, respectively. No date of construction is offered for the stock ponds or stock pen structures. Because preliminary research indicated that these buildings and structures did not meet the 45- and 50-year age thresholds for consideration as historical resources under CEQA, no survey of the Built Environment was warranted.

4.4.2 Regulatory Framework

State

California Register of Historical Resources

In California, the term "historical resource" includes

any object, building, structure, site, area, place, record, or manuscript which is historically or archaeologically significant, or is significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California. (Public Resources Code Section 5020.1[j])

In 1992, the California legislature established the California Register of Historical Resources (CRHR) "to be used by state and local agencies, private groups, and citizens to identify the state's historical resources and to indicate what properties are to be protected, to the extent prudent and feasible, from substantial adverse change" (Public Resources Code Section 5024.1[a]). The criteria for listing resources on the CRHR were expressly developed to be in accordance with previously established criteria developed for listing in the NRHP, enumerated below. According to California law, a resource is considered historically significant if it (i) retains "substantial integrity," and (ii) meets at least one of the following criteria:

- 1. Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage.
- 2. Is associated with the lives of persons important in our past.

- 3. Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values.
- 4. Has yielded, or may be likely to yield, information important in prehistory or history.

To understand the historic importance of a resource, sufficient time must have passed to obtain a scholarly perspective on the events or individuals associated with the resource. A resource less than 50 years old may be considered for listing in the CRHR if it can be demonstrated that sufficient time has passed to understand its historical importance (14 Cal. Code of Regs. §4852[d][2]).

The CRHR protects cultural resources by requiring evaluations of the significance of prehistoric and historic resources. The criteria for the CRHR are nearly identical to those for the NRHP, and properties listed or formally designated as eligible for listing in the NRHP are automatically listed in the CRHR, as are the state landmarks and points of interest. The CRHR also includes properties designated under local ordinances or identified through local historical resource surveys.

California Environmental Quality Act

The following CEQA statutes (Public Resources Code ("PRC") section 21000, et seq.) and CEQA Guidelines (14 Cal. Code of Regs. 15000, et seq.) are relevant to the analysis of archaeological, historic, and tribal cultural resources (TCRs):

- PRC Section 21083.2(g) defines "unique archaeological resource."
- PRC Section 21084.1 and CEQA Guidelines Section 15064.5(a) defines "historical resources." In addition, CEQA Guidelines Section 15064.5(b) defines the phrase "substantial adverse change in the significance of an historical resource;" it also defines the circumstances when a project would materially impair the significance of a historical resource.
- PRC Section 21074(a) defines "tribal cultural resources."
- PRC Section 5097.98 and CEQA Guidelines Section 15064.5(e) set forth standards and steps to be employed following the accidental discovery of human remains in any location other than a dedicated ceremony.
- PRC Sections 21083.2(b) and 21083.2(c) and CEQA Guidelines Section 15126.4 provide information regarding the mitigation framework for archaeological and historic resources, including examples of preservation-in-place mitigation measures. Preservation in place is the preferred manner of mitigating impacts to significant archaeological sites because it maintains the relationship between artifacts and the archaeological context and may help avoid conflict with religious or cultural values of groups associated with the archaeological site(s).

A project may have a significant effect on the environment if it may cause "a substantial adverse change in the significance of an historical resource" (PRC Section 21084.1; 14 CCR 15064.5[b]).

A "substantial adverse change in the significance of an historical resource" reflecting a significant effect under CEQA means "physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of an historical resource would be materially impaired" (14 CCR

15064.5[b][1]; PRC Section 5020.1[q]). In turn, the significance of a historical resource is materially impaired when a project does any of the following (14 CCR 15064.5[b][2]):

- Demolishes or materially alters in an adverse manner those physical characteristics of an historical resource that convey its historical significance and that justify its inclusion in, or eligibility for, inclusion in the California Register; or
- 2. Demolishes or materially alters in an adverse manner those physical characteristics that account for its inclusion in a local register of historical resources pursuant to Section 5020.1(k) of the PRC or its identification in an historical resources survey meeting the requirements of Section 5024.1(g) of the PRC, unless the public agency reviewing the effects of the project establishes by a preponderance of evidence that the resource is not historically or culturally significant; or
- Demolishes or materially alters in an adverse manner those physical characteristics of a historical resource
 that convey its historical significance and that justify its eligibility for inclusion in the California Register as
 determined by a lead agency for purposes of CEQA.

Pursuant to these sections, the CEQA inquiry begins with evaluating whether a project site contains any "historical resources," and then evaluates whether that project will cause a substantial adverse change in the significance of a historical resource such that the resource's historical significance would be materially impaired.

If it can be demonstrated that a project will cause damage to a unique archaeological resource, the lead agency may require reasonable efforts be made to permit any or all of these resources to be preserved in place or left in an undisturbed state. To the extent that they cannot be left undisturbed, mitigation measures are required (PRC Sections 21083.2[a]–[c]).

PRC Section 21083.2(g) defines a unique archaeological resource as an archaeological artifact, object, or site about which it can be clearly demonstrated that without merely adding to the current body of knowledge, there is a high probability that it meets any of the following criteria:

- 1. Contains information needed to answer important scientific research questions and that there is a demonstrable public interest in that information.
- 2. Has a special and particular quality such as being the oldest of its type or the best available example of its type.
- 3. Is directly associated with a scientifically recognized important prehistoric or historic event or person.

Impacts on non-unique archaeological resources are generally not considered a significant environmental impact (PRC Section 21083.2[a]; 14 CCR section 15064.5[c][4]). However, if a non-unique archaeological resource qualifies as a TCR (PRC Sections 21074[c] and 21083.2[h]), further consideration of significant impacts is required.

CEQA Guidelines section 15064.5 assigns special importance to human remains and specifies procedures to be used when Native American remains are discovered. These procedures are detailed in PRC section 5097.98.

Health and Safety Code Section 7050.5

California law protects Native American burials, skeletal remains, and associated grave goods, regardless of their antiquity, and provides for the sensitive treatment and disposition of those remains. Health and Safety Code section 7050.5 requires that if human remains are discovered in any place other than a dedicated cemetery, no further disturbance or excavation of the site or nearby area reasonably suspected to contain human remains can occur until the county coroner has examined the remains (Health and Safety Code section 7050.5[b]). PRC section

5097.98 also outlines the process to be followed in the event that remains are discovered. If the coroner determines or has reason to believe the remains are those of a Native American, the coroner must contact the NAHC within 24 hours (Health and Safety Code section 7050.5[c]). The NAHC will notify the "most likely descendant." With the permission of the landowner, the most likely descendant may inspect the site of discovery. The inspection must be completed within 48 hours of notification of the most likely descendant by the NAHC. The most likely descendant may recommend means of treating or disposing of, with appropriate dignity, the human remains and/or items associated with Native Americans.

4.4.3 Thresholds of Significance

The significance criteria used to evaluate the project impacts to cultural resources are based on Appendix G of the CEQA Guidelines. According to Appendix G of the CEQA Guidelines, a significant impact related to cultural resources would occur if the project would:

- 1. Cause a substantial adverse change in the significance of a historical resource pursuant to CEQA Guidelines section 15064.5.
- 2. Cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines section 15064.5.
- 3. Disturb any human remains, including those interred outside of formal cemeteries.
- 4. Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:
 - a. Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or
 - b. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in PRC section 5024.1(c). In applying these criteria, the lead agency must consider the significance of the resource to a California Native American tribe.

4.4.4 Impact Analysis

Threshold CUL-1: Would the project cause a substantial adverse change in the significance of a historical resource pursuant to CEQA Guidelines Section 15064.5?

As defined by the CEQA Guidelines (14 CCR § 15000, et seq.), a "historical resource" is considered to be a resource that is listed in or eligible for listing in the National Register of Historic Places (NRHP) or California Register of Historical Resources (CRHR), has been identified as significant in a historical resource survey, or is listed on a local register of historical resources. Under CEQA, a project may have a significant effect on the environment if it may cause "a substantial adverse change in the significance of an historical resource" (Public Resources Code section 21084.1; 14 CCR § 15064.5(b)). If a site is listed or eligible for listing in the CRHR, or included in a local register of historic resources, or identified as significant in a historical resources survey (meeting the requirements of Public Resources Code Section 5024.1(q)), it is a historical resource and is presumed to be historically or culturally significant for the purposes of CEQA (Public Resources Code section 21084.1; 14 CCR § 15064.5(a)).

No historical resources or unique archaeological resources as defined by CEQA were identified within the project site as a result of either the CHRIS records search or as a result of the cultural resources survey. The existing structures within the project site do not meet the age thresholds for consideration as historical resources under CEQA. However, the geoarchaeological review revealed that there is a potential for the project site to contain subsurface archaeological deposits. In the event that unanticipated cultural resources are encountered during project implementation, an assessment and evaluation of the resource would be conducted potentially resulting in the determination that the resource is historical in accordance with the definition outlined in CEQA Guidelines § 15064.5. As a result, the project has a potential to impact and thus cause a substantial adverse change in the significance of a yet unknown historical resource. Impacts are considered potentially significant.

Thus, mitigation is required to address impacts related to the inadvertent discovery of yet unknown historical resources, as outlined in mitigation measures MM-CUL-1, MM-CUL-2, MM-CUL-3, and MM-CUL-4. MM-CUL-1 requires the retention of a qualified archaeologist to carry out all mitigation measures related to archaeological resources. MM-CUL-2 requires that all project construction personnel participate in a cultural resources sensitivity training given by the qualified archaeologist. MM-CUL-3 requires archaeological and Native American monitoring for ground disturbing activities within areas of the project site mapped as containing Holocene-age undifferentiated alluvium. MM-CUL-4 includes the protocols and procedures for the inadvertent discovery of archaeological resources. With implementation of MM-CUL-1, MM-CUL-2, MM-CUL-3, and MM-CUL-4, significant impacts to historical resources would be reduced to less than significant with mitigation incorporated.

Threshold CUL-2: Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines Section 15064.5?

Although no known archaeological resources would be impacted by the project, the geoarchaeological review indicates portions of the project site containing Holocene-age alluvium and Yolo series soils are likely to contain buried soil horizons and, therefore, have a potential to contain subsurface archaeological deposits. Similarly, comments received from the Fernandeño Tataviam Band of Mission Indians as part of informal tribal outreach efforts indicate that cultural resources are located in the project site's vicinity and recommended that caution be taken during project-related ground disturbance. Should intact archaeological deposits be encountered during project implementation, impacts to these resources would be potentially significant.

Thus, mitigation is required to address impacts related to the inadvertent discovery archaeological resources, as outlined in mitigation measures MM-CUL-1, MM-CUL-2, MM-CUL-3, and MM-CUL-4. MM-CUL-1 requires the retention of a qualified archaeologist to carry out all mitigation measures related to archaeological resources. MM-CUL-2 requires that all project construction personnel participate in a cultural resources sensitivity training given by the qualified archaeologist. MM-CUL-3 requires archaeological and Native American monitoring for ground disturbing activities within areas of the project site mapped as containing Holocene-age undifferentiated alluvium. MM-CUL-4 includes the protocols and procedures for the inadvertent discovery of archaeological resources. With implementation of MM-CUL-1, MM-CUL-2, MM-CUL-3, and MM-CUL-4, significant impacts to historical resources would be reduced to less than significant with mitigation incorporated.

Threshold CUL-3: Would the project disturb any human remains, including those interred outside of formal cemeteries?

No prehistoric or historic-period burials, including those interred outside of formal cemeteries, were identified within the project site as a result of the CHRIS records search, NAHC SLF search and informal tribal outreach, or pedestrian survey. Therefore, the likelihood of encountering human remains within the subsurface of the project site is low. However, the

possibility of encountering human remains within the project site exists such that potentially significant impacts could occur. The discovery of human remains would require handling in accordance with PRC 5097.98, which states that in the event that human remains are discovered during construction, construction activity shall be halted, and the area shall be protected until consultation and treatment can occur as prescribed by law. Therefore, with adherence to state law and with the implementation of **MM-CUL-5**, impacts would be **less than significant**.

4.4.5 Mitigation Measures

The following mitigation measures would reduce potentially significant impacts to historical resources, archaeological resources, and human remains to a less than significant level.

- MM-CUL-1 Retention of a Qualified Archaeologist. Before the Public Works Director, or designee, issues grading permit and before starting any ground-disturbing activity, the applicant must retain a qualified archaeologist, defined as one meeting the Secretary of the Interior's Professional Qualification Standards for archeology (U.S. Department of Interior 1983) to carry out all mitigation measures related to archeological resources.
- MM-CUL-2 Cultural Resources Sensitivity Training. Before starting ground-disturbing activities, the qualified archaeologist must conduct cultural resources sensitivity training for all construction personnel. Construction personnel will be informed of the types of archaeological resources that may be encountered, and of the proper procedures to be enacted in the event of an inadvertent discovery of archaeological resources or human remains. The applicant must ensure that construction personnel attend the training and retain documentation demonstrating attendance.
- MM-CUL-3 Archaeological and Native American Monitoring. An archaeological monitor (working under the direct supervision of the qualified archaeologist) and a Native American monitor must be present during all ground-disturbing activities within areas of the Project mapped as containing Holoceneage undifferentiated alluvium. The qualified archaeologist, in coordination with the City's Project Manager, may reduce or discontinue monitoring if it is determined that the possibility of encountering buried archaeological deposits is low based on observations of soil stratigraphy or other factors. Archaeological monitoring must be conducted by an archaeologist familiar with the types of archaeological resources that could be encountered within the Project area. The Native American monitor must be selected from the Native American groups identified by the Native American Heritage Commission (NAHC) as having affiliation with the Project area. The archaeological monitor and Native American monitor are empowered to halt or redirect grounddisturbing activities away from the vicinity of a discovery until the qualified archaeologist has evaluated the discovery and determined appropriate treatment. The archaeological monitor must keep daily logs detailing the types of activities and soils observed, and any discoveries. After monitoring is completed, the qualified archaeologist must prepare a monitoring report that details the results of monitoring. The report must be submitted to the City and any Native American groups who request a copy. A copy of the final report must be filed at the SCCIC.
- MM-CUL-4 Inadvertent Discovery of Archaeological Resources. Should unanticipated discovery of archaeological materials occur, the contractor must immediately cease all work activities in the area (within approximately 100 feet) of the discovery until it can be evaluated by a qualified archaeologist. Prehistoric archaeological materials might include obsidian and chert flaked-stone

tools (e.g., projectile points, knives, scrapers) or tool-making debris; culturally darkened soil ("midden") containing heat-affected rocks, artifacts, or shellfish remains; stone milling equipment (e.g., mortars, pestles, handstones, or milling slabs); and battered stone tools, such as hammerstones and pitted stones. Historic-period materials might include stone or concrete footings and walls; filled wells or privies; and deposits of metal, glass, and/or ceramic refuse. Construction may not resume until the qualified archaeologist has conferred with the City's Project Manager on the significance of the resource.

If it is determined by the qualified archaeological monitor that the discovered archaeological resource constitutes a historical resource or unique archaeological resource under CEQA, avoidance and preservation in place is the preferred manner of mitigation. Preservation in place maintains the important relationship between artifacts and their archaeological context and also serves to avoid conflict with traditional and religious values of groups who may ascribe meaning to the resource. Preservation in place may be accomplished by, but is not limited to, avoidance, incorporating the resource into open space, capping, or deeding the site into a permanent conservation easement. In the event that preservation in place is demonstrated to be infeasible and data recovery through excavation is the only feasible mitigation available, an Archaeological Resources Data Recovery and Treatment Plan shall be prepared and implemented by the qualified archaeologist in consultation with the City that provides for the adequate recovery of the scientifically consequential information contained in the archaeological resource. The qualified archaeologist and City's Project Manager must consult with appropriate Native American representatives in determining treatment for prehistoric or Native American resources to ensure cultural values ascribed to the resource, beyond those that are scientifically important, are considered.

MM-CUL-5

Inadvertent Discovery of Human Remains. If human remains are encountered, the contractor must halt work in the vicinity (within 100 feet) of the discovery and contact the Los Angeles County Coroner in accordance with Public Resources Code (PRC) section 5097.98 and Health and Safety Code section 7050.5. The City's Project Manager must also be notified. If the County Coroner determines the remains are Native American, the Native American Heritage Commission NAHC must be notified in accordance with Health and Safety Code section 7050.5(c) and PRC Section 5097.98. The NAHC will designate a most likely descendent (MLD) for the remains per PRC section 5097.98. Until the landowner has conferred with the MLD, the contractor must ensure that the immediate vicinity where the discovery occurred is not disturbed by further activity, is adequately protected according to generally accepted cultural or archaeological standards or practices, and that further activities take into account the possibility of multiple burials.

4.4.6 Level of Significance After Mitigation

Threshold CUL-1: Would the project cause a substantial adverse change in the significance of a historical resource pursuant to CEQA Guidelines Section 15064.5?

No historical resources were identified as a result of the cultural resources investigation conducted for this project. However, as previously established, there is potential for unknown resources to be encountered during project implementation that may meet the criteria of a historical resource set forth in CEQA. In order to ensure unknown historical resources that are inadvertently encountered during project implementation are assessed, evaluated (if

necessary) and treated in accordance with CEQA, mitigation measures have been developed and will be required of the Project if approved. As such, the Project would result in **less than significant impacts** with implementation of MM-CUL-1, MM-CUL-2, MM-CUL-3, and MM-CUL-4 regarding the potential to cause a substantial adverse change in the significance of a historical resource pursuant to CEQA Guidelines § 15064.5.

Threshold CUL-2: Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines Section 15064.5?

No significant archaeological resources were identified as a result of the cultural resources investigation conducted for this project. However, as previously established, there is potential for unknown resources to be encountered during project implementation that may meet the criteria of significant set forth in CEQA. To ensure unknown archaeological resources that are inadvertently encountered during project implementation are assessed, evaluated (if necessary) and treated in accordance with CEQA, mitigation measures have been developed and will be required of the project if approved. As such, the Project would result in **less than significant impacts** with implementation of MM-CUL-1, MM-CUL-2, MM-CUL-3, and MM-CUL-4 regarding the potential to cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines § 15064.5.

Threshold CUL-3: Would the project disturb any human remains, including those interred outside of formal cemeteries?

No human remains, including those interred outside of dedicated cemeteries, were identified as a result of the cultural resources investigation conducted for this project. However, as previously established, there is potential for unknown human remains to be encountered during project implementation that may meet the criteria of significant set forth in CEQA. In order to ensure unknown human remains that are inadvertently encountered during project implementation are treated in accordance with CEQA, mitigation measures have been developed and will be required of the Project if approved. As such, the Project would result in **less than significant impacts** with implementation of MM-CUL-5 for potential project disturbance of any human remains, including those interred outside of dedicated cemeteries.

4.4.7 Cumulative Effects

CEQA requires cumulative effects be considered for projects that are proposed or pending, recently approved, under construction, or reasonably foreseeable as well as the proposed project for this EIR. Cumulative effects on cultural resources evaluate whether impacts of the proposed project and related projects, when considered together, substantially diminish the number of cultural resources within the same or similar context or property type.

As discussed in Chapter 3.8 Related Projects, of this EIR, there are four pending related projects that have the potential to contribute to cumulative impacts to historical resources

As discussed above, there are no known significant historical resources pursuant to CEQA Guidelines section 15064.5 present on the project site. However, there is a potential for impacts to unidentified historical resources, which would require implementation of MM-CUL-1, MM-CUL-2, MM-CUL-3, and MM-CUL-4. With mitigation, project-specific impacts to historical resources would be reduced to a less than significant level at the project site. Because all historical resources are unique and nonrenewable resources, projects that demolish or alter historical resources have the potential to erode a general cultural landscape to which the historical resources belong. Therefore, implementation of cumulative projects could result in a cumulatively considerable impact on historical resources with regard to potential known and/or unknown historical resource at the Project site. Further, according to PRC

section 21084.1 any project that may cause a substantial adverse change in the significance of an historical resource is a project that may have a significant effect on the environment, and any significant impact to a historical resource must be evaluated and mitigated accordingly. Therefore, although cumulative development would have the potential to result in a significant impact associated with the loss of historical resources through the physical demolition, destruction, relocation, or alteration of a resource or its immediate surroundings, the project would not contribute to cumulatively considerable impacts, which are typically site-specific. The project-specific mitigation combined with the mandatory evaluation of potential impacts to other nearby cumulative projects would ensure that there would be **no cumulatively considerable impacts** to historical resources.

As discussed above, there are no known significant archaeological resources pursuant to CEQA Guidelines section 15064.5 present on the project site. Because all archaeological resources are unique and nonrenewable resources, projects that demolish or alter certain archaeological resources have the potential to erode a general cultural landscape to which the archaeological resources belong. Therefore, implementation of the project could result in a cumulatively significant effect on archaeological resources when combined with other cumulative development in the area due to the loss of identified or unknown archaeological resources through the physical demolition, destruction, relocation, or alteration of a resource or its immediate surroundings such that the significance of a resource would be materially impaired. However, the project is required to implement MM-CUL-1, MM-CUL-2, MM-CUL-3, and MM-CUL-4, which would reduce project-related impacts to a less than significant level at the project site. Because there are no known archaeological resources at the project site, the mitigation is for inadvertent discoveries.

As discussed above, there are no known human remains, including those interred outside of dedicated cemeteries, present on the Project site. Because human remains are unique and nonrenewable resources, projects that demolish, destroy, alter or move human remains have the potential to erode a general cultural landscape to which the human remains belong. Therefore, cumulative development within the area would have the potential to result in a cumulative impact associated with the loss of yet unidentified human remains through the physical demolition, destruction, relocation, or alteration of a remains or their immediate surroundings. However, human remains are generally site-specific and the project's potential impacts to disturbance human remains would be reduced to less than significant with implementation of project-specific MM-CUL-5. All cumulative projects would similarly be required to comply with State Health and Safety Code Section 7050.5., PRC Sections 5097.94 and 5097.98, and all other applicable laws. Based on the degree of protection afforded by MM-CUL-5 for potential project-specific impacts to human remains, the **project would not contribute to cumulatively considerable impacts** related to disturb any human remains, including those interred outside of dedicated cemeteries.

4.4.8 References Cited

- Byrd, Brian F., and Mark L. Raab. 2007. Prehistory of the Southern Bight: Models for a New Millennium. In California Prehistory: Colonization, Culture, and Complexity, edited by Terry L. Jones and Kathryn A. Klar, pp 215-227.
- California Missions Resource Center. 2018. San Fernando Rey de España. Electronic document, https://www.missionscalifornia.com/mission-facts/san-fernando-rey-de-espa%C3%B1a, accessed December 12, 2018.
- City of Santa Clarita. 2012. "City Profile". Electronic resource, www.santa-clarita.com/Index.aspx?page=572, accessed February 7, 2012.

- Cook, Sherburne F. 1978. Historical Demography. In California, edited by Robert F. Heizer, pp. 91–98, Handbook of North American Indians, Vol. 8, W. C. Sturtevant, general editor, Smithsonian Institution, Washington, D.C.
- Dinkelspiel, Frances. 2008. Towers of Gold, St. Martin's Press, New York.
- Erlandson, Jon M. 1994. Early Hunter-Gatherers of the California Coast, Plenum Press, New York.
- Johnson, John R., and David D. Earle. 1990. Tataviam Geography and Ethnohistory. Journal of California and Great Basin Anthropology 12(2):191-214.
- Jones, Terry L., Gary M. Brown, L. Mark Raab, Janet L. McVickar, W. Geoffrey Spaulding, Douglas J. Kennett, Andrew York, and Phillip L. Walker. 1999. Environmental Imperatives Reconsidered: Demographic Crises in Western North America during the Medieval Climactic Anomaly. Current Anthropology, 40(2): 137-70.
- Los Angeles Times. 1985. "If You're Nice to Them, They'll Do Anything for You: A Man and His Mules." Los Angeles Times, March 6, 1985.
- Los Angeles Times. 1998. "Back to the Rancho," Los Angeles Times, January 8, 1998.
- McCawley, William. 1996. The First Angelinos: The Gabrielino Indians of Los Angeles, Malki Museum Press, Banning, California.
- McIntyre, Michael James. 1990. Cultural Resources of the Upper Santa Clara River Valley, Los Angeles and Ventura Counties, California, in Archaeology and Ethnohistory of Antelope Valley and Vicinity, edited by Bruce Love and William H. De Witt, Occasional Papers No. 2, Antelope Valley Archaeological Society, Lancaster, California.
- McWilliams, Carey. 1946. Southern California: An Island on the Land, Gibbs Smith, Layton, Utah.
- Meyer, L. 1981. Los Angeles, 1781-1981: A Special Bicentennial Issue of California History, Spring 1981, California Historical Society, Los Angeles.
- Milliken, Randall, Laurence H. Shoup, and Beverly R. Ortiz. 2009. Ohlone/Costanoan Indians of the San Francisco Peninsula and their Neighbors, Yesterday and Today, prepared by Archaeological and Historical Consultants, Oakland, California, prepared for National Park Service Golden Gate National Recreation Area, San Francisco, California.
- NETR (Nationwide Environmental Title Research LLC). 2018a. Historic Topographical Maps of Santa Clarita, dating from 1900, 1905, 1910, 1914, 1924, 1930, 1932, 1945, 1946, 1955, 1961, 1964, 1975, 1988, 1994, 1999, 2012, and 2015. Accessed August 2018. https://www.historicaerials.com/viewer.
- NETR. 2018b. Historic Aerial Images of Santa Clarita, dating from 1927, 1954, 1974, 1978, 2005, 2009, 2010, 2012, and 2014. Accessed August 2018. https://www.historicaerials.com/viewer.
- Newhall Foundation. 2011. About H. M. Newhall. Electronic resource, www.newhallfoundation.org/aboutHMN.html, accessed April 29, 2011.

- Pitt, Leonard. 1994. The Decline of the Californios: A Social History of the Spanish-speaking Californians, 1846-1890. University of California Press, Berkeley.
- Santa Clarita Valley Groundwater Sustainability Agency. 2012. Santa Clara River Valley East Groundwater Subbasin- The Connection Between Groundwater & Surface Water. Accessed October 2022. https://scvgsa.org/wp-content/uploads/2020/07/SCVGSA_WS4_GSurface_handout_draft_v1.4.pdf.
- Santa Clarita Valley Historical Society. n.d. "Santa Clarita Valley History in Pictures." Electronic resource, www.scvhistory.com/scvhistory/scvhistory.htm, accessed February 7, 2012.
- Starr, Kevin. 2007. California: A History, Modern Library, New York.
- State Lands Commission. 1982. Grants of Land in California Made by Spanish or Mexican Authorities. Electronic document, www.slc.ca.gov/reports/grants_of_land/part_1.pdf, accessed February 8, 2012.
- Triem, Judy and Mitch Stone. 1996. National Register of Historic Places Registration Form for Rancho Camulos.

 On file at South Central Coastal Information Center, Fullerton, CA, 1996.
- U.S. Department of the Interior. 1983. The Secretary of the Interior Professional Qualifications Standards. https://www.nps.gov/subjects/historicpreservation/upload/standards-guidelines-archeology-historic-preservation.pdf, accessed February 23, 2024.
- Wallace, William J. 1955. A Suggested Chronology for Southern California Coastal Archaeology. Southwestern Journal of Anthropology 11:214-230.
- Warren, Claude N. 1968. Cultural Tradition and Ecological Adaptation on the Southern California Coast. In Archaic Prehistory in the Western United States, C. Irwin-Williams, ed, pp. 1-4. Eastern New Mexico University Contributions in Anthropology. Portales.
- Willey, H. I. 1886. Report of the Surveyor-General of the State of California from August 1, 1884 to August 1, 1886, Sacramento State Office. Electronic resource http://www.slc.ca.gov/Misc_Pages/Historical/Surveyors_General/reports/Willey_1884_188 6.pdf, accessed December 26, 2012.

4.5 Energy

This section describes the existing setting of the proposed Wiley Canyon Mixed-Use Project (project) site, identifies associated regulatory requirements, and evaluates potential impacts related to implementation of the proposed project.

In addition to the documents incorporated by reference, the following analysis is based, in part, on the Air Quality Technical Report included as Appendix B to this EIR.

4.5.1 Existing Conditions

Electricity

According to the California Energy Commission (CEC) California Energy Demand Updated Forecast 2016–2026, California used approximately 280,536 gigawatt-hours of electricity in 2014 (CEC 2016). Electricity usage in California for differing land uses varies substantially by the type of uses in a building, type of construction materials used in a building, and the efficiency of all electricity-consuming devices within a building. Because of the state's energy efficiency standards and efficiency and conservation programs, California's per-capita energy use has remained stable for more than 30 years, while the national average has steadily increased.

According to the U.S. Energy Information Administration (EIA), California used approximately 250,379 gigawatt hours of electricity in 2019 (EIA 2021a). In 2019, by sector, commercial uses utilized 46% of the state's electricity, followed by 35% for residential uses, and 19% for industrial uses (EIA 2021a). Electricity usage in California for differing land uses varies substantially by the type of uses in a building, type of construction materials used in a building, and the efficiency of all electricity-consuming devices within a building. Due to California's energy efficiency building standards and efficiency and conservation programs, California's electricity use per capita in the commercial sector is lower than any other state except Hawaii (EIA 2021b).

Southern California Edison (SCE) provides electricity to the project. SCE, a subsidiary of Edison International, serves approximately 180 cities in 11 counties across central and Southern California. According to the California Public Utilities Commission (CPUC), approximately 84 billion kilowatt-hours of electricity were used in SCE's service area in 2017. Demand forecasts anticipate that approximately 75 billion kilowatt-hours of electricity would be used in SCE's service area in 2020 (CPUC 2020).

SCE receives electric power from a variety of sources. According to the 2019 SCE Power Content Label, renewable energy accounts for 35% of the overall energy resources, with geothermal resources at 6%, wind power at 12%, large hydroelectric sources at 1% and solar energy is at 16% (SCE 2020).

Natural Gas

According to the EIA, California used approximately 2,154,030 million cubic feet of natural gas in 2019 (EIA 2021b). In 2019 (the most recent year for which data is available), by sector, industrial uses utilized 36% of the state's natural gas, followed by 33% from electric power, 19% from residential, 11% from commercial, and 1% from transportation uses (EIA 2021a). While the supply of natural gas in the United States and production in the lower 48 states has increased greatly since 2008, California produces little, and imports 91% of its supply of natural gas (EIA 2021c).

The Southern California Gas Company (SoCalGas) provides the City with natural gas service. The SoCalGas service territory encompasses approximately 20,000 square miles and more than 500 communities. In the California

Energy Demand mid-energy demand scenario, natural gas demand is projected to have an annual growth rate of 0.03% in the SoCalGas service territory. In year 2021, approximately 6,756 million therms¹ were used in the SoCalGas service area per year (CEC 2023a).

Petroleum

According to the EIA, California used approximately 681 million barrels of petroleum in 2018, with the majority (584 million barrels) used for the transportation sector (EIA 2021d). There are 42 U.S. gallons in a barrel, so this equates to a total daily use of approximately 78.4 million gallons of petroleum among all sectors and 67.2 million gallons for the transportation sector. In California, petroleum fuels refined from crude oil are the dominant source of energy for transportation sources. Petroleum usage in California includes petroleum products such as motor gasoline, distillate fuel, liquefied petroleum gases, and jet fuel. California has implemented policies to improve vehicle efficiency and to support use of alternative transportation, which are described in Section 4.5.2.

4.5.2 Regulatory Framework

Federal

Federal Energy Policy and Conservation Act

In 1975, Congress enacted the Federal Energy Policy and Conservation Act, which established the first fuel economy standards for on-road motor vehicles in the United States. Pursuant to the act, the National Highway Traffic Safety Administration is responsible for establishing additional vehicle standards. In 2012, new fuel economy standards for passenger cars and light trucks were approved for model years 2017 through 2021 (77 Federal Register 62624–63200). Fuel economy is determined based on each manufacturer's average fuel economy for the fleet of vehicles available for sale in the United States.

Energy Policy Act of 2005

In January 2005, the Energy Policy Act was signed into law. It addresses energy production in the United States, including: energy efficiency; renewable energy; oil and gas; coal; Tribal energy; nuclear matters and security; vehicles and motor fuels, including ethanol; hydrogen; electricity; energy tax incentives; (hydropower and geothermal energy; and climate change technology. The Energy Policy Act provides loan guarantees for entities that develop or use innovative technologies that avoid the by-production of greenhouse gases. Another provision of the Energy Policy Act is the Renewable Fuel Standard (RFS), which increases the amount of biofuel that must be mixed with gasoline sold in the United States.

Energy Independence and Security Act of 2007

The Energy Independence and Security Act of 2007 (EISA) includes the following provisions related to energy efficiency:

- Expansion of the RFS (Section 202)
- Appliance and Lighting Efficiency Standards (Sections 301–325)
- Building Energy Efficiency (Sections 411–441)

The RFS requires ever-increasing levels of renewable fuels to replace petroleum (EPA 2017). The U.S. Environmental Protection Agency is responsible for developing and implementing regulations to ensure that

One therm is equal to 100,000 BTU or 100 kBTU.

transportation fuel sold in the United States contains a minimum volume of renewable fuel. The RFS program regulations were developed in collaboration with refiners, renewable fuel producers, and many other stakeholders.

The first RFS program was created under the Energy Policy Act of 2005 and established the first renewable fuel volume mandate in the United States. As required under the act, the original RFS program (RFS1) required 7.5 billion gallons of renewable fuel to be blended into gasoline by 2012. Under the EISA, the RFS program was expanded in several key ways that lay the foundation for achieving significant reductions in greenhouse gas (GHG) emissions from the use of renewable fuels, reducing imported petroleum, and encouraging the development and expansion of the renewable fuels sector in the United States. The updated program (RFS2) includes the following:

- EISA expanded the RFS program to include diesel, in addition to gasoline.
- EISA increased the volume of renewable fuel required to be blended into transportation fuel from 9 billion gallons in 2008 to 36 billion gallons by 2022.
- EISA established new categories of renewable fuel and set separate volume requirements for each one.
- EISA required the U.S. Environmental Protection Agency to apply lifecycle GHG performance threshold standards to ensure that each category of renewable fuel emits fewer GHGs than the petroleum fuel it replaces.

Additional provisions of the EISA address energy savings in government and public institutions, research for alternative energy, additional research in carbon capture, international energy programs, and the creation of "green" jobs.

State

Warren-Alquist Act

The California Legislature passed the Warren–Alquist Act in 1974, which created the California Energy Commission (CEC). The legislation also incorporated the following three key provisions designed to address the demand side of the energy equation:

- It directed the CEC to formulate and adopt the nation's first energy conservation standards for both buildings constructed and appliances sold in California.
- It removed the responsibility of electricity demand forecasting from the utilities, which had a financial interest in high-demand projections, and transferred it to a more impartial CEC.
- The CEC was directed to embark on an ambitious research and development program, with a particular focus on fostering what were characterized as non-conventional energy sources.

Integrated Energy Policy Report

Senate Bill 1389 requires the CEC to prepare a biennial integrated energy policy report that assesses major energy trends and issues facing the state's electricity, natural gas, and transportation fuel sectors and provides policy recommendations to conserve resources; protect the environment; ensure reliable, secure, and diverse energy supplies; enhance the state's economy; and protect public health and safety (Public Resources Code section 25301(a)). The Energy Commission prepares these assessments and associated policy recommendations every two years, with updates in alternate years, as part of the Integrated Energy Policy Report (IEPR).

The 2019 IEPR was adopted January 31, 2020, and continues work towards improving electricity, natural gas, and transportation fuel energy use in California. The 2019 IEPR focuses on a variety of topics such as including the environmental performance of the electricity generation system, landscape-scale planning, the response to the gas leak at the Aliso Canyon natural gas storage facility, transportation fuel supply reliability issues, updates on Southern California electricity reliability, methane leakage, climate adaptation activities for the energy sector, climate and sea level rise scenarios, and the California Energy Demand Forecast (CEC 2019). The 2020 IEPR Update was adopted in March 2021. The 2020 IEPR Update is divided into three volumes, Volume One is focused on California's transportation future and the transition to zero-emission vehicles. Volume Two addresses the viability and improvements in microgrid technology and infrastructure and its ability to contribute to a clean and resilient energy system. Volume Three is framed around California's energy demand outlook and plan for increases in energy demand resulting from growth in plug in electric vehicles (CEC 2021).

State of California Energy Action Plan

The CEC and CPUC approved the first State of California Energy Action Plan in 2003. The plan established shared goals and specific actions to ensure the provision of adequate, reliable, and reasonably priced electrical power and natural gas supplies; it also identified cost-effective and environmentally sound energy policies, strategies, and actions for California's consumers and taxpayers. In 2005, the CEC and CPUC adopted a second Energy Action Plan to reflect various policy changes and actions of the prior 2 years.

At the beginning of 2008, the CEC and CPUC determined that it was not necessary or productive to prepare a new energy action plan. This determination was based, in part, on a finding that the state's energy policies have been significantly influenced by the passage of Assembly Bill (AB) 32, the California Global Warming Solutions Act of 2006 (discussed below). Rather than produce a new energy action plan, the CEC and CPUC prepared an "update" that examines the state's ongoing actions in the context of global climate change.

Senate Bill 1078 (2002)

Senate Bill (SB) 1078 established the California Renewable Portfolio Standard (RPS) Program and required that a retail seller of electricity purchase a specified minimum percentage of electricity generated by eligible renewable energy resources as defined in any given year, culminating in a 20% standard by December 31, 2017. These retail sellers include electrical corporations, community choice aggregators, and electric service providers. The bill relatedly required the CEC to certify eligible renewable energy resources, design and implement an accounting system to verify compliance with the RPS by retail sellers, and allocate and award supplemental energy payments to cover above-market costs of renewable energy.

Senate Bills 107 (2006), X1-2 (2011), 350 (2015), 100 (2018), and 1020 (2022)

SB 107 (2006) accelerated the RPS established by SB 1078 by requiring that 20% of electricity retail sales be served by renewable energy resources by 2010 (not 2017). Additionally, SB X1-2 (2011) requires all California utilities to generate 33% of their electricity from eligible renewable energy resources by 2020. Specifically, SB X1-2 sets a three-stage compliance period: by December 31, 2013, 20% had to come from renewables; by December 31, 2016, 25% had to come from renewables; and by December 31, 2020, 33% will come from renewables.

SB 350 (2015) requires retail seller and publicly owned utilities to procure 50% of their electricity from eligible renewable energy resources by 2030, with interim goals of 40% by 2024 and 45% by 2027.

SB 100 (2018) increased the standards set forth in SB 350. The bill establishes that 44% of the total electricity sold per year to retail customers in California be secured from qualifying renewable energy sources by December 31, 2024, with that number increasing to 52% by December 31, 2027, and 60% by December 31, 2030. SB 100 states that it is the policy of the state that eligible renewable energy resources and zero-carbon resources supply 100% of the retail sales of electricity to California. This bill requires that the achievement of 100% zero-carbon electricity resources do not increase the carbon emissions elsewhere in the western grid and that the achievement not be achieved through resource shuffling.

SB 1020 (September 2022) revises the standards from SB 100, requiring the following percentage of retail sales of electricity to California end-use customers come from eligible renewable energy resources and zero-carbon resources:

- 90% by December 31, 2035
- 95% by December 31, 2040
- 100% by December 31, 2045

Consequently, utility energy generation from non-renewable resources is expected to be reduced overtime and any project's reliance on non-renewable energy sources would also be reduced.

Assembly Bill 1007 (2005)

AB 1007 (2005) required the CEC to prepare a statewide plan to increase the use of alternative fuels in California (State Alternative Fuels Plan). The CEC prepared the plan in partnership with the California Air Resources Board (CARB) and in consultation with other state agencies, plus federal and local agencies. The State Alternative Fuels Plan assessed various alternative fuels and developed fuel portfolios to meet California's goals to reduce petroleum consumption, increase alternative fuels use, reduce GHG emissions, and increase in-state production of biofuels without causing a significant degradation of public health and environmental quality.

Assembly Bill 32 (2006) and Senate Bill 32 (2016)

In 2006, the state legislature enacted AB 32, the California Global Warming Solutions Act of 2006. AB 32 requires California to reduce its GHG emissions to 1990 levels by 2020. In 2016, the Legislature enacted SB 32, which extended the horizon year of the state's codified GHG reduction planning targets from 2020 to 2030, requiring California to reduce its GHG emissions to 40% below 1990 levels by 2030. In accordance with AB 32 and SB 32, CARB prepared scoping plans to guide the development of statewide policies and regulations for the reduction of GHG emissions. Many of the policy and regulatory concepts identified in the scoping plans focused on increasing energy efficiencies, using renewable resources, and reducing the consumption of petroleum-based fuels (such as gasoline and diesel). As such, the state's GHG emissions reduction planning framework creates co-benefits for energy-related resources. Additional information on AB 32 and SB 32 is provided in Section 4.6.2 in Section 4.6, Greenhouse Gas Emissions, of this EIR.

California Building Standards Code

The 2022 California Building Standards Code, as adopted by the Santa Clarita Municipal Code ("SCMC"), governs new construction of, and additions and alterations to, residential and nonresidential buildings. The 2022 Energy Code focuses on four key areas in newly constructed homes and businesses:

- Encouraging electric heat pump technology for space and water heating, which consumes less energy and produces fewer emissions than gas-powered units.
- Establishing electric-ready requirements for single-family homes to position owners to use cleaner electric heating, cooking, and electric vehicle (EV) charging options whenever they choose to adopt those technologies.
- Expanding solar photovoltaic (PV) system and battery storage standards to make clean energy available onsite and complement the state's progress toward a 100% clean electricity grid.
- Strengthening ventilation standards to improve indoor air quality.

CALGreen instituted mandatory minimum environmental performance standards for all ground-up, new construction of commercial, low-rise residential, and state-owned buildings, as well as schools and hospitals. The current code is the 2022 California Building Standards Code. The mandatory standards require the following:

- In new projects or additions to alterations that add 10 or more vehicular parking spaces, provide designated parking for low-emitting, fuel-efficient and carpool/van pool vehicles.
- Construction shall facilitate future installation of EV supply equipment.
- Shade trees shall be planted to comply with specifications for surface parking areas, landscape areas, and hardscape areas.
- Water conserving plumbing fixtures (water closets and urinals) and fittings (faucets and showerheads) shall comply with efficiency standards.
- Outdoor potable water use in landscaped areas shall comply with a local water efficient landscape ordinance or the current California Department of Water Resources Model Water Efficient Landscape Ordinance, whichever is more stringent.
- Outdoor recycled water supply systems shall be installed in accordance with applicable state codes.
- Installations of heating, ventilation, and air conditioning (HVAC); refrigeration; and fire suppression equipment shall comply with specified standards.

The CALGreen standards also include voluntary efficiency measures that are implemented at the discretion of agencies and applicants.

State Vehicle Standards

In response to the transportation sector accounting for more than half of California's carbon dioxide emissions, AB 1493 was enacted in 2002. AB 1493 required CARB to set GHG emissions standards for passenger vehicles, light-duty trucks, and other vehicles determined by the state board to be those whose primary use is noncommercial personal transportation in the state. The bill required that CARB set GHG emissions standards for motor vehicles manufactured in 2009 and all subsequent model years. The 2009 through 2012 standards resulted in a reduction in approximately 22% of GHG emissions compared to emissions from the 2002 fleet, and the 2013 through 2016 standards resulted in a reduction of approximately 30%.

In 2019, the EPA and NHTSA published the Safer Affordable Fuel-Efficient Vehicles Rule Part One: One National Program (SAFE-1) (84 Fed. Reg. 51310), which revoked California's authority to set its own GHG emissions standards and set zero-emission vehicle (ZEV) mandates in California. In March 2020, Part Two was issued which set carbon dioxide (CO₂) emissions standards and corporate average fuel economy standards for passenger vehicles and light-duty trucks for model years 2021 through 2026. In 2022, EPA reinstated California's authority under the Clean Air Act to implement its own GHG emission standards and ZEV sales mandate. EPA's action concludes its reconsideration of the 2019 SAFE-1 rule by finding that the actions taken under the previous administration as a part of SAFE-1 were decided in error and are now entirely rescinded.

Although the focus of the state's vehicle standards is on the reduction of air pollutants and GHG emissions, one cobenefit of implementation of these standards is a reduced demand for petroleum-based fuels.

Advanced Clean Cars Program

The ACC I program (January 2012) is an emissions-control program for model years 2015 through 2025. The program combines the control of smog- and soot-causing pollutants and GHG emissions into a single coordinated package of regulations: the Low-Emission Vehicle (LEV) regulation for criteria air pollutant and GHG emissions and a technology forcing regulation for zero-emission vehicles (ZEV) that contributes to both types of emission reductions (CARB 2021a). The package includes elements to reduce smog-forming pollution, reduce GHG emissions, promote clean cars, and provide the fuels for clean cars. To improve air quality, CARB has implemented new emission standards to reduce smog-forming emissions beginning with 2015 model year vehicles. It is estimated that in 2025 cars will emit 75% less smog-forming pollution than the average new car sold in 2015. The ZEV program will act as the focused technology of the ACC I program by requiring manufacturers to produce increasing numbers of ZEVs and plug-in hybrid EVs in the 2018 to 2025 model years.

The ACC II program is currently in development to establish the next set of LEV and ZEV requirements for model years after 2025 to contribute to meeting federal ambient air quality ozone standards and California's carbon neutrality standards (CARB 2021a). The main objectives of ACC II are:

- 1. Maximize criteria and GHG emission reductions through increased stringency and real-world reductions.
- 2. Accelerate the transition to ZEVs through both increased stringency of requirements and associated actions to support wide-scale adoption and use.

The ACC II rulemaking package was adopted by CARB on August 25, 2022.

Executive Order N-79-20

EO N-79-20 (2020) sets the goal for the State that 100% of in-state sales of new passenger cars and trucks will be zero-emission by 2035. EO-N-79-20 also sets goals for transition to 100% zero emission all medium- and heavy-duty vehicles by 2045, zero emission drayage trucks by 2035, and zero emission off-road vehicles and equipment by 2035, where feasible. Among other directives to further this executive order, for passenger cars and trucks, the Governor directed CARB to develop and propose regulations requiring increasing volumes of new zero-emission vehicles sold in the State towards the target of 100% of in-state sales by 2035. The Governor also directed the Governor's Office of Business and Economic Development to develop a Zero-Emissions Vehicle Market Development Strategy, which was completed in February 2021. The executive order also directs updates and assessments to ensure zero-emission vehicle infrastructure is in place to support the levels of electric vehicle adoption required by the order.

Advanced Clean Trucks Program

The purpose of the ACT Regulation (June 2020) is to accelerate the market for zero-emission vehicles in the medium- and heavy-duty truck sector (CARB 2021b). Requiring medium- and heavy-duty vehicles to transition to zero-emissions technology will reduce health risks to people living in and visiting California and is needed to help California meet established near- and long-term air quality and climate mitigation targets. The regulation has two components including (1) a manufacturer sales requirement and (2) a reporting requirement:

- 1. Zero-emission truck sales: Manufacturers who certify Class 2b-8 chassis or complete vehicles with combustion engines will be required to sell zero-emission trucks as an increasing percentage of their annual California sales from 2024 to 2035. By 2035, zero-emission truck/chassis sales would need to be 55% of Class 2b 3 truck sales, 75% of Class 4 8 straight truck sales, and 40% of truck tractor sales.
- 2. Company and fleet reporting: Large employers including retailers, manufacturers, brokers and others will be required to report information about shipments and shuttle services. Fleet owners, with 50 or more trucks, will be required to report about their existing fleet operations. This information will help identify future strategies to ensure that fleets purchase available zero-emission trucks and place them in service where suitable to meet their needs.

Sustainable Communities Strategy

The Sustainable Communities and Climate Protection Act of 2008, or SB 375, coordinates land use planning, regional transportation plans, and funding priorities to help California meet its GHG emissions reduction mandates. As codified in California Government Code Section 65080, SB 375 requires metropolitan planning organizations (e.g., Southern California Association of Governments) to include a Sustainable Communities Strategy in their regional transportation plan. The main focus of the Sustainable Communities Strategy is to plan for growth in a fashion that will ultimately reduce GHG emissions, but the strategy is also part of a bigger effort to address other development issues, including transit and vehicle miles traveled (VMT), which influence the consumption of petroleum-based fuels.

Local

City of Santa Clarita General Plan

The Conservation and Open Space Element of the City of Santa Clarita General Plan (2011) has identified the following goals, objectives and policies aimed at greenhouse gas reduction in private development projects in the City.

Goal CO 8: Development designed to improve energy efficiency, reduce energy and natural resource consumption, and reduce emissions of greenhouse gases.

Objective CO 8.1: Comply with the requirements of State law, including AB 32, SB 375 and implementing regulations, to reach targeted reductions of greenhouse gas (GHG) emissions.

- Policy CO 8.1.1: Create and adopt a Climate Action Plan [CAP] within 18 months of the OVOV [One Valley One Vision] adoption date of the City's General Plan Update that meets State requirements and includes the following components:
 - A. Plans and programs to reduce GHG emissions to State-mandated targets, including enforceable reduction measures;
 - a. The CAP may establish goals beyond 2020, which are consistent with the applicable laws and regulations referenced in this paragraph and based on current science;
 - b. The CAP shall include specific and general tools and strategies to reduce the City's current and projected 2020 inventory and to meet the CAP's target for GHG reductions by 2020;
 - c. The CAP shall consider, among other GHG reduction strategies, the feasibility of development fees; incentive and rebate programs; and, voluntary and mandatory reduction strategies in areas of energy efficiency, renewable energy, water conservation and efficiency, solid waste, land use and transportation.
 - B. Mechanisms to ensure regular review of progress towards the emission reduction targets established by the Climate Action Plan;
 - C. Procedures for reporting on progress to officials and the public;
 - D. Procedures for revising the plan as needed to meet GHG emissions reduction targets; and
 - E. Allocation of funding and staffing for Plan implementation.
- Policy CO 8.1.3: Revise codes and ordinances as needed to address energy conservation, including but not limited to the following:
 - A. Strengthen building codes for new construction and renovation to achieve a higher level of energy efficiency, with a goal of exceeding energy efficiency beyond that required by Title 24;
 - B. Adopt a Green Building Program to encourage green building practices and materials, along with appropriate ordinances and incentives;
 - C. Require orientation of buildings to maximize passive solar heating during cool seasons, avoid solar heat gain during hot periods, enhance natural ventilation, promote effective use of daylight, and optimize opportunities for on-site solar generation;
 - D. Encourage mitigation of the "heat island" effect through use of cool roofs, light-colored paving, and shading to reduce energy consumption for air conditioning.
- Policy CO 8.1.4: Provide information and education to the public about energy conservation and local strategies to address climate change.
 - Objective CO 8.3: Encourage the following green building and sustainable development practices on private development projects, to the extent reasonable and feasible.
- Policy CO 8.3.1: Evaluate site plans proposed for new development based on energy efficiency pursuant to LEED (Leadership in Energy and Environmental Design) standards for New Construction and Neighborhood Development, including the following: a) location efficiency; b) environmental preservation; c) compact, complete, and connected neighborhoods; and d) resource efficiency, including use of recycled materials and water.

- Policy CO 8.3.2: Promote construction of energy efficient buildings through requirements for LEED certification or through comparable alternative requirements as adopted by local ordinance.
- Policy CO 8.3.3: Promote energy efficiency and water conservation upgrades to existing non-residential buildings at the time of major remodel or additions.
- Policy CO 8.3.4: Encourage new residential development to include on-site solar photovoltaic systems, or pre-wiring, in at least 50% of the residential units, in concert with other significant energy conservation efforts.
- Policy CO 8.3.5: Encourage on-site solar generation of electricity in new retail and office commercial buildings and associated parking lots, carports, and garages, in concert with other significant energy conservation efforts.
- Policy CO 8.3.6: Require new development to use passive solar heating and cooling techniques in building design and construction, which may include but are not be limited to building orientation, clerestory windows, skylights, placement and type of windows, overhangs to shade doors and windows, and use of light colored roofs, shade trees, and paving materials.
- Policy CO 8.3.7: Encourage the use of trees and landscaping to reduce heating and cooling energy loads, through shading of buildings and parking lots.
- Policy CO 8.3.8: Encourage energy-conserving heating and cooling systems and appliances, and energy-efficiency in windows and insulation, in all new construction.
- Policy CO 8.3.9: Limit excessive lighting levels, and encourage a reduction of lighting when businesses are closed to a level required for security.
- Policy CO 8.3.10: Provide incentives and technical assistance for installation of energy-efficient improvements in existing and new buildings.
- Policy CO 8.3.12: Reduce extensive heat gain from paved surfaces through development standards wherever feasible.

City of Santa Clarita Climate Action Plan

In June 2011, the City Council adopted a new General Plan (formerly referred to as One Valley One Vision), which is intended to guide growth and development within all portions of the Santa Clarita Valley. As noted above, Policy CO 8.1.1 of the City's General Plan states the City shall create and adopt a Climate Action Plan (CAP) within 18 months of the One Valley One Vision adoption date of the City's General Plan Update that meets state requirements. Consistent with this policy, in January 2011, the City began the process of developing a CAP, with the Final CAP published in August 2012. The City of Santa Clarita Climate Action Plan (2012), part of the General Plan, serves as a component of the general plan document for the City to address GHG emissions. Using the goals, objectives, and policies of the General Plan as a starting point, the CAP identifies mitigation measures that can be quantified and translated into significant reductions in the GHG emissions by the year 2020. The development of a CAP begins with a premise that establishing a complete GHG emissions inventory within the City's boundary is the critical foundation for the remainder of the project. The CAP has identified GHG reduction measures that include the building energy sector as a main target.

City of Santa Clarita Green Building Standards Code

The City of Santa Clarita Green Building Standards Code is codified in SCMC Chapters 25.01 through 25.04. SCMC section 25.04.010 provides an expedited, streamlined electric vehicle charging station (EVCS) permitting and inspection process that complies with AB 1236. SCMC Chapter 17.35 helps to create a mixture of commercial and residential uses that emphasize a sense of place, pedestrianism, and public transportation. The Non-Motorized Plan (SCMC Chapter 17.35 and section 17.80.050) focuses on connections to transit, safe routes to schools that aren't auto dependent, and the relationship between trails and development. It impacts the design and connectivity of these systems throughout the City. The City's Construction and Demolition regulations (SCMC Chapter 15.46) requires all demolition projects, commercial projects over \$200,000, all new commercial projects over 1,000 square feet, all new residential construction projects, and all residential additions and improvements that increase building area, volume, or size to recycle a minimum of 65% of all inert materials and 65% of all other materials

4.5.3 Thresholds of Significance

The significance criteria used to evaluate the project impacts to energy are based on Appendix G of the CEQA Guidelines. According to Appendix G of the CEQA Guidelines, a significant impact related to energy would occur if the project would:

- 1. Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation.
- 2. Conflict with or obstruct a state or local plan for renewable energy or energy efficiency.
- 3. Result in cumulatively considerable energy impacts.

Methodology

In 2021, the SCAQMD, in conjunction with the California Air Pollution Control Officers Association (CAPCOA) and other California air districts, released the latest version, at the time of project analysis, of the CalEEMod, Version 2020.4.0. The purpose of this model is to calculate construction-source and operational-source criteria pollutant and GHG emissions from direct and indirect sources as well as energy usage. Accordingly, CalEEMod has been used to determine the project's anticipated construction and operational transportation and facility energy demands.

Construction

Construction of the project would result in energy consumption primarily associated with use of off-road construction equipment, on-road vendor (material delivery) trucks, haul trucks, and worker vehicles. All details for construction criteria air pollutants discussed in the Methodology subsection in Section 4.2.4 of Section 4.2, Air Quality, are also applicable for the estimation of construction-related energy consumption. As such, see Section 4.2.4 for a discussion of construction calculation methodology and assumptions used in the energy analysis.

Operation

Energy consumption in support of or related to project operations would include transportation energy demands (energy consumed by on-road vehicles accessing the project site), and facilities energy demands (energy consumed by building operations and site maintenance activities). All details for operational criteria air pollutants discussed in the Methodology subsection in Section 4.2.4 of Section 4.2, Air Quality, are also applicable for the estimation of operation-related energy consumption.

4.5.4 Impact Analysis

Threshold ENG-1: Would the project result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?

Implementation of the project would increase the demand for electricity and natural gas at the project site and petroleum consumption in the region during construction and operation.

Electricity

Construction

Temporary electric power for as-necessary lighting and electronic equipment such as computers may be needed inside temporary construction trailers. However, the electricity used for such activities would be temporary and would be substantially less than that required for project operation and would have a negligible contribution to the project's overall energy consumption. As such, impacts would be **less than significant**, and no mitigation is required.

Operation

The operational phase would require electricity for multiple purposes including, but not limited to, building heating and cooling, lighting, appliances, and electronics.

The California Emissions Estimator Model (CalEEMod, version 2020.4.0) was used to estimate project emissions from energy uses (see Appendix B). Default electricity generation rates in CalEEMod were used (based on the proposed land use and climate zone) based on compliance with 2022 Title 24. According to these estimations, the project would consume approximately 4,937,106 kWh per year, not accounting for mitigation measures such as Energy Star lighting. This equates to approximately 4,937 megawatt-hours per year. In 2021, SCE supplied 36,376 million kWh of electricity to residential customers (CEC 2023b).

As described above, the electricity demand calculation for the project assumes compliance with Title 24 standards. The project would be required to meet the California Building Energy Efficiency Standards (24 CCR, Part 6) which improve the energy efficiency of nonresidential buildings.

Although electricity consumption would increase due to the implementation of the project, the building envelope; heating, ventilation, and air conditioning; lighting; and other systems, such as electric motor equipment, shall be designed to maximize energy performance. The project is subject to statewide mandatory energy requirements as outlined in 24 Cal. Code of Regs. ("CCR") Part 6. Title 24 CCR Part 11, contains voluntary energy measures that are applicable to project under CALGreen. The project would meet Title 24 requirements applicable at that time, as required by state regulations as enforced through the plan review process. For these reasons, the electricity consumption of the project would not be considered inefficient or wasteful, and impacts would be **less than significant**, and no mitigation is required.

Natural Gas

Construction

Natural gas is not anticipated to be required during construction of the project. Fuels used for construction would primarily consist of diesel and gasoline, which are discussed below under the "petroleum" subsection. Any minor amounts of natural gas that may be consumed as a result of project construction would be substantially less than that required for project operation and would have a negligible contribution to the project's overall energy consumption. As such, impacts would be **less than significant**, and no mitigation is required.

Operation

Natural gas consumption during operation would be required for various purposes, including, but not limited to, building heating and cooling.

Default natural gas generation rates in CalEEMod for the proposed land use and climate zone were used and based on compliance with 2022 Title 24 regulations (see Appendix B). According to these estimations, the project would consume approximately 8,531,437 kBTUs per year. In 2021, SoCal Gas supplied 2,309 million kBTU of natural gas to residential customers (CEC 2023a).

As with electricity demand, natural gas demand calculation for the project assumes compliance with Title 24 standards. Although natural gas consumption would increase due to the implementation of the project, the building envelope; heating, ventilation, and air conditioning; lighting; and other systems shall be designed to maximize energy performance. The project is subject to statewide mandatory energy requirements as outlined in 24 CCR Part 6. 24 CCR Part 11, contains voluntary energy measures that are applicable to project under CALGreen. The project would meet Title 24 requirements applicable at that time, as required by state regulations as enforced through the plan review process. Project-consumed natural gas is also subject to the cap-and-trade regulation. For these reasons, the natural gas consumption of the project would not be considered inefficient or wasteful, and impacts would be **less than significant**, and no mitigation is required.

Petroleum

Construction

Petroleum would be consumed throughout construction of the project. Fuel consumed by construction equipment would be the primary energy resource expended over the course of construction, and vehicle miles traveled (VMT) associated with the transportation of construction materials and construction worker commutes would also result in petroleum consumption. Heavy-duty construction equipment associated with construction activities and haul trucks involved in relocating dirt around the project site would rely on diesel fuel. Construction workers would travel to and from the project site throughout the duration of construction. It is assumed that construction workers would travel to and from the project site in gasoline-powered vehicles.

Heavy-duty construction equipment of various types would be used during construction. CalEEMod was used to estimate construction equipment usage; results are included in Appendix B of this EIR. Based on that analysis, diesel-fueled construction equipment would operate for an estimated 118,696 hours, as summarized in Table 4.5-1, Hours of Operation for Construction Equipment.

Table 4.5-1. Hours of Operation for Construction Equipment

Phase	Hours of Equipment Use
Demolition	1,680
Site Preparation	1,080
Grading/Excavation	26,248
Drainage/Utilities/Sub-Grade	20,592
Foundation/Concrete Pour	8,160
Building Construction	50,432
Architectural Coating	7,232
Paving	3,344
Total	118,696

Source: Appendix B.

Fuel consumption from construction equipment was estimated by converting the total CO₂ emissions from each construction phase to gallons using conversion factors for CO₂ to gallons of gasoline or diesel. The conversion factor for gasoline is 8.78 kilograms per metric ton CO₂ per gallon, and the conversion factor for diesel is 10.21 kilograms per metric ton CO₂ per gallon (The Climate Registry 2018). The estimated diesel fuel use from construction equipment is shown in Table 4.5-2, Construction Equipment Diesel Demand.

Table 4.5-2. Construction Equipment Diesel Demand

Phase	Pieces of Equipment ^a	Equipment CO ₂ (MT) ^a	kg CO ₂ / Gallon ^b	Gallons
Demolition	15	41.82	10.21	4,096
Site Preparation	9	32.61	10.21	3,194
Grading/Excavation	17	1,207.20	10.21	118,237
Drainage/Utilities/ Sub-Grade	18	527.75	10.21	51,690
Foundation/Concrete Pour	12	189.32	10.21	18,543
Building Construction	16	868.05	10.21	85,020
Architectural Coating	8	123.19	10.21	12,066
Paving	11	66.40	10.21	6.503
			Total	299,348

Sources:

Notes: CO_2 = carbon dioxide; MT = metric ton; kg = kilogram.

Fuel consumption from worker, haul and vendor trips was estimated by converting the total CO₂ emissions from the construction phase to gallons using the conversion factors for CO₂ to gallons of gasoline or diesel. Worker vehicles are assumed to be gasoline fueled, and vendor/hauling vehicles are assumed to be diesel fueled.

Estimations for total worker, hauling, and vendor fuel consumption are provided in Table 4.5-3, Construction Worker Vehicle Gasoline Demand.

a Appendix B.

b The Climate Registry 2018.

Table 4.5-3. Construction Worker Vehicle Gasoline Demand

Source	Fuel Type	Gallons
Hauling Trucks	Diesel	49,191
Vendor Trucks	Diesel	176,317
Worker Vehicles	Gasoline	30,435
	Total	255,943

Sources:

Notes: CO_2 = carbon dioxide; MT = metric ton; kg = kilogram.

As shown in Tables 4.5-2 and 4.5-3, the project is estimated to consume 555,291 gallons (299,348+255,943) of petroleum during the construction phase. Notably, the Project would be subject to CARB's In-Use Off-Road Diesel Vehicle Regulation that applies to certain off-road diesel engines, vehicles, or equipment greater than 25 horsepower. The regulation (1) imposes limits on idling, requires a written idling policy, and requires a disclosure when selling vehicles; (2) requires all vehicles to be reported to CARB (using the Diesel Off-Road Online Reporting System) and labeled; (3) restricts the adding of older vehicles into fleets starting on January 1, 2014; and (4) requires fleets to reduce their emissions by retiring, replacing, or repowering older engines or installing Verified Diesel Emission Control Strategies (i.e., exhaust retrofits). The fleet must either show that its fleet average index was less than or equal to the calculated fleet average target rate, or that the fleet has met the Best Achievable Control Technology requirements. Project construction would represent a "single-event" petroleum demand and would not require on-going or permanent commitment of petroleum resources for this purpose. Overall, the Project would not be unusual as compared to overall local and regional demand for energy resources and would not involve characteristics that require equipment that would be less energy-efficient than at comparable construction sites in the region or state. Therefore, impacts would be less than significant, and no mitigation is required.

Operation

The majority of fuel consumption resulting from the project's operational phase would be attributable to residents and visitors traveling to and from the mixed-use project site.

Petroleum fuel consumption associated with motor vehicles traveling to and from the project site during operation is a function of VMT. As shown in Appendix B, the annual VMT attributable to the project is expected to be 8,927,345 VMT per year. Similar to construction worker and vendor trips, fuel consumption for operation was estimated by converting the total CO2 emissions from each land use type to gallons using the conversion factors for CO2 to gallons of gasoline or diesel.

Calculations for annual mobile-source fuel consumption are provided in Table 4.5-4, Petroleum Consumption - Operation. Mobile sources from the project would result in approximately 356,133 gallons of gasoline per year and 26,147 gallons of diesel consumed per year beginning in 2025.

Table 4.5-4. Petroleum Consumption - Operation

Fuel	Vehicle MT CO ₂	kg CO ₂ /Gallon	Gallons
Gasoline	3,126.85	8.78	356,133.20
Diesel	266.96	10.21	26,146.63
		Total	382,279.83

Sources:

Appendix B.

a Appendix B.

b The Climate Registry 2022.

Notes: MT = metric ton; CO_2 = carbon dioxide; kg = kilogram.

Over the lifetime of the project, the fuel efficiency of vehicles is expected to increase. Accordingly, the amount of petroleum consumed as a result of vehicular trips to and from the project site during operation would decrease over time. There are numerous regulations in place that require and encourage increased fuel efficiency and reduce the reliance on petroleum fuel for transportation over time. For example, CARB has adopted an approach to passenger vehicles by combining the control of smog-causing pollutants and GHG emissions into a single, coordinated package of standards. The approach also includes efforts to support and accelerate the number of plug-in hybrids and zero-emissions vehicles in California (CARB 2023). Additionally, in response to SB 375, CARB adopted the goal of reducing per-capita GHG emissions from 2005 levels by 8% by 2020, and 18% by 2035 for light-duty passenger vehicles in the planning area for the Southern California Association of Governments. As such, operation of the project is expected to use decreasing amounts of petroleum over time due to advances in fuel economy. In addition, EO N-79-20 (2020) sets the goal for the State that 100% of in-state sales of new passenger cars and trucks will be zero-emission by 2035. EO-N-79-20 also sets goals for transition to 100% zero emission all medium- and heavy-duty vehicles by 2045, zero emission drayage trucks by 2035, and zero emission off-road vehicles and equipment by 2035, where feasible. Among other directives to further this executive order, for passenger cars and trucks, the Governor directed CARB to develop and propose regulations requiring increasing volumes of new zero-emission vehicles sold in the State towards the target of 100% of in-state sales by 2035.

In summary, although the project would increase petroleum use during operation as a result of mixed-use operational commuting to the project, the use would be a small fraction of the statewide use and, due to efficiency increases, would diminish over time. Enhanced fuel economies realized pursuant to federal and state regulatory actions, and related transition of vehicles to alternative energy sources (e.g., electricity, natural gas, biofuels, hydrogen cells) would likely decrease future gasoline fuel demands per VMT. Trip generation and VMT associated with the project are consistent with other mixed uses of similar scale and configuration. That is, the project does not propose uses or operations that would inherently result in excessive and wasteful activities, nor associated excess and wasteful vehicle energy consumption. Given these considerations, petroleum consumption associated with the project would not be considered inefficient or wasteful and would result in a less-than-significant impact; no mitigation is required.

Threshold ENG-2. Would the project conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

Title 24 of the California Code of Regulations contains energy efficiency standards for residential and nonresidential buildings based on a state mandate to reduce California's energy demand. Specifically, Title 24 addresses a number of energy efficiency measures that impact energy used for lighting, water heating, heating, and air conditioning, including the energy impact of the building envelope such as windows, doors, skylights, wall/floor/ceiling assemblies, attics, and roofs.

Part 6 of CCR Title 24 specifically establishes energy efficiency standards for residential and nonresidential buildings constructed in the State of California in order to reduce energy demand and consumption. The project would comply with 24 CCR Part 6. In accordance with Title 24 CCR Part 6, the project would have energy-efficient appliances, high-efficiency lighting, and solar energy on site. The project would also include on-site electric vehicle charging stations in accordance with CALGreen code.

Title 24 CCR Part 11, contains voluntary and mandatory energy measures that are applicable to the project under CALGreen. As discussed under Threshold ENG-1, the project would result in an increased demand for electricity, natural gas, and petroleum. Because the project would comply with applicable law, no conflict with existing energy standards and regulations would occur. Therefore, impacts would be considered **less than significant**, and no mitigation is required.

Threshold ENG-3. Would the project result in a cumulatively considerable energy impact?

Cumulative projects that could exacerbate the project's energy impacts include any projects that could result in wasteful, inefficient, or unnecessary use of energy. However, the project would not result in wasteful, inefficient, or unnecessary use of energy during construction or operation. Construction will result in short-term and temporary energy demands. Operation of the project would not result in a wasteful, inefficient or unnecessary use of energy or conflict with an applicable plan. Therefore, the project would have a less-than-significant impact with regards to cumulative energy impacts.

4.5.5 Mitigation Measures

Project impacts would be less than significant, and no mitigation is required.

4.5.6 Level of Significance After Mitigation

Project impacts are less than significant, and no mitigation is required.

4.5.7 Cumulative Effects

As discussed in Threshold ENG-3 above, the project would result in **less-than-significant** impacts with regards to cumulative energy impacts.

4.5.8 References Cited

CARB (California Air Resources Board). 2021a. Advanced Clean Cars Program. Accessed December 2021 at https://ww2.arb.ca.gov/our-work/programs/advanced-clean-cars-program/about.

- CARB. 2021b. Advanced Clean Trucks Fact Sheet. August 20, 2021. Accessed at https://ww2.arb.ca.gov/sites/default/files/2021-08/200625factsheet_ADA.pdf.
- CARB. 2023. Advanced Clean Cars Program. https://ww2.arb.ca.gov/our-work/programs/advanced-clean-cars-program/about.
- CEC (California Energy Commission). 2014. *California Energy Demand 2014–2024 Final Forecast. January 2014*. Accessed December 2018. http://docs.ppsmixeduse.com/ppp/DEIR_References/2013_0501_caenergycommission_californiaenergydemand.pdf.
- CEC. 2016. California Energy Demand 2016–2026, Revised Electricity Forecast. CEC-200-2016-001-V1. January 2016. Accessed December 2018. http://docketpublic.energy.ca.gov/PublicDocuments/15-IEPR-03/TN207439_20160115T152221_California_Energy_Demand_20162026_Revised_Electricity_Forecast.pdf.

- CEC (California Energy Commission). 2019. 2019 Integrated Energy Policy Report Update. https://ww2.energy.ca.gov/2019_energypolicy/.
- CEC 2021. 2020 Intergraded Energy Policy Report Update. March 23, 2021. Accessed October 2021. https://www.energy.ca.gov/data-reports/reports/integrated-energy-policy-report/2020-integrated-energy-policy-report-update.
- CEC. 2023a. "Gas Consumption by Entity." Accessed February 2023. http://ecdms.energy.ca.gov/gasbyutil.aspx.
- CEC. 2023b. "Electric Consumption by Entity." Accessed February 2023. http://ecdms.energy.ca.gov/elecbyutil.aspx.
- City of Santa Clarita. 2011. City of Santa Clarita General Plan, Conservation and Open Space Element. June 2011. Accessed June 2020. https://www.codepublishing.com/CA/SantaClarita/html/SantaClaritaGP/6%20-%20Conservation%20and%20Open%20Space%20Element.pdf.
- City of Santa Clarita. 2012. City of Santa Clarita Climate Action Plan Final Report. Prepared for City of Santa Clarita Community Development Department. Prepared by ENVIRON International Corporation. August 2012. Accessed June 2020. http://greensantaclarita.com/files/2012/10/APPROVED-CAP-AUGUST-2012.pdf.
- CPUC (California Public Utilities Commission). 2020. 2020 California Renewables Portfolio Standard Annual Report. November 2020. Accessed March 2021. https://www.cpuc.ca.gov/uploadedFiles/CPUC_Public_Website/Content/Utilities_and_Industries/Energy_-_Electricity_and_Natural_Gas/2020%20RPS%20Annual%20Report.pdf.
- EIA (U.S. Energy Information Administration). 2016a. "California State Profile and Energy Estimates Table F19: Natural Gas Consumption Estimates, 2014." Accessed December 2018. http://www.eia.gov/state/seds/data.cfm?incfile=/state/seds/sep_fuel/html/fuel_use_ng.html&sid=US&sid=CA.
- EIA. 2016b. "California State Profile and Energy Estimates Table F15: Total Petroleum Consumption Estimates, 2014." Accessed December 2018. http://www.eia.gov/state/seds/data.cfm?incfile=/state/seds/sep_fuel/html/fuel_use_pa.html&sid=US&sid=CA.
- EIA (U.S. Energy Information Administration). 2021a. "State Electricity Profiles California Electricity Profile 2019". November 2, 2020. Accessed October 2021. https://www.eia.gov/electricity/state/california/index.php.
- EIA. 2021b "California State Energy Profile." February 18, 2021. Accessed October 2021. https://www.eia.gov/state/print.php?sid=CA.
- EIA. 2021c. "Natural Gas Consumption by End Use." September 30, 2021. Accessed October 2021. https://www.eia.gov/dnav/ng/ng_cons_sum_a_EPG0_VC0_mmcf_a.htm.
- EIA. 2021d. "Total Petroleum Consumption Estimates, 2019." [Online] 2021. Accessed October 2021. https://www.eia.gov/state/seds/data.php?incfile=/state/seds/sep_fuel/html/fuel_use_pa.html&sid=US&sid=CA.

- EPA (U.S. Environmental Protection Agency). 2017. "Overview for Renewable Fuel Standard." Last updated June 7, 2017. Accessed February 2019. https://www.epa.gov/renewable-fuel-standard-program/overview-renewable-fuel-standard.
- The Climate Registry. 2022. Default Emission Factors. May 2022. https://theclimateregistry.org/wp-content/uploads/2022/11/2022-Default-Emission-Factors-Final.pdf.

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4.6 Geology and Soils

This section describes the existing geological setting of the proposed Wiley Canyon Project (project) site, identifies associated regulatory requirements, evaluates potential impacts, and identifies mitigation measures related to implementation of the proposed project.

4.6.1 Environmental Setting

This section describes the existing conditions in the project area based largely on the findings of the preliminary geotechnical report that was prepared for the project site (Appendix E), and also identifies the paleontological resources that could be encountered by the proposed project.

Regional Geology

The project site is located in the Transverse Ranges Geomorphic Province of California, which is characterized by east-west trending mountains and faults. Sedimentary basins within the Transverse Ranges include the Ventura Basin, Soledad Basin, Ridge Basin, and the San Fernando Valley. The Ventura, Soledad, and Ridge sedimentary basins are the result of the interplay of the San Andreas Fault and the Transverse Range fault system. Seismic activity along the San Andreas Fault is in response to differential movement between the Pacific geologic plate (west of the fault) and the North American geologic plate (east of the fault). The project site is located in the eastern portion of the Ventura Basin between the Northridge Blind Thrust and San Gabriel Fault Zones, located approximately 0.44 miles southeast and 3.7 miles northeast of the site, respectively.

Local Geology

The project site is mapped in an area that is depicted as entirely covered with recent alluvium (Appendix E). The Plio-Pleistocene Saugus Formation underlies the alluvium. The Saugus Formation is divided into two members, the lower Sunshine Ranch Member (Tsr) and the upper unnamed member, referred to simply as Saugus Formation (TQs). The ridge located at the northeastern portion of the property, is mapped as the upper member of the Saugus Formation. The ridges located to the southeast of the property are mapped as the Sunshine Ranch Member. Based on published geologic maps, the contact between the two members is inferred to be roughly beneath the project site. The geologic units at the site that were identified during the preliminary geotechnical investigation were as follows:

Soil/Plow Pan – Raised areas of disturbed upper alluvial soils ranging from 1 to 3 feet thick are found on the surface from past ranching and brush clearing activities.

Artificial Fill - Minor amounts of non-compacted artificial fill were present at the site. These fills were generated during prior site development, grading of the minor access roads, and grading for Wiley Canyon Road. A review of historic aerial photographs indicated that an excavated reservoir was formerly present at the central portion of the project site as well as an old drainage swale at the northerly portion of the property. The reservoir and drainage channel have since been backfilled.

Alluvium - Undifferentiated Quaternary alluvial and fluvial deposits were found across the site that consist of brown to yellowish brown, fine silty sand and sandy silt with occasional thin interbeds of clay and silty clay in the upper 20 to 25 feet. Below this depth, the alluvium predominantly consists of fine- to coarse-grained sand and silty sand. Interbedded sands with cobbles and gravel are present within the range of depths explored. Loose/soft soil layers

were encountered in several borings that could be susceptible to static and seismically-induced settlement if not addressed by site preparations or design.

Saugus Formation – Bedrock identified as the Saugus Formation was encountered in 4 borings that were drilled at the site at depths ranging from 65 to 75 feet. The bedrock was described as light gray to pale yellowish-brown to grayish-green in color that was found to be dense to very dense siltstone and sandstone with trace amounts of gravel.

Seismicity and Faulting

As is the case for all of Southern California, the project is located in a seismically active area with numerous faults that are considered capable of producing substantive seismic events. The California Geological Survey (CGS) (CGS 2018) classifies faults as follows:

- Holocene-active faults, which are faults that have moved during the past approximate 11,700 years. These
 faults are capable of surface rupture.
- Pre-Holocene faults, which are faults that have not moved in the past 11,700 years. This class of fault may
 be capable of surface rupture but is not regulated under the Alquist-Priolo Earthquake Fault Zoning Act of
 1972, which regulates construction of buildings to be used for human occupancy.
- Age-undetermined faults, which are faults where the recency of fault movement has not been determined.

Holocene-active faults have been responsible for large historical earthquakes in Southern California, including the 1933 Long Beach earthquake (moment magnitude [Mw] 6.4), the 1952 Kern County earthquake (Mw 7.5), the 1971 San Fernando earthquake (Mw 6.6), and the 1992 Landers earthquake (Mw 7.3), for example (SCEDC 2022). The Southern California region also includes blind thrust faults, such as the Northridge Blind Thrust, which are faults that are concealed at depth and do not show evidence of surface rupture but are capable of substantial earthquakes. Examples include the 1987 Whittier Narrows earthquake (Mw 5.9) and the 1994 Northridge earthquake (Mw 6.7). Both of these earthquakes occurred on previously unidentified thrust faults (Appendix E).

Prominent Holocene-active and pre-Holocene faults within 20 miles of the project region are listed in Table 4.6-1 and shown on Figure 4.6-1, Regional Faulting. The maximum earthquake magnitudes shown in Table 4.6-1 are based on forecasting from the Uniform California Earthquake Rupture Forecast (UCERF3) modeling (Appendix E).

Table 4.6-1. List of Earthquake Faults

Fault Name	Closest Distance from Project Site (in miles)	Maximum Magnitude
Northridge	0.4	6.9
Holser	3.4	6.9
Santa Susana	3.6	6.9
San Gabriel	3.7	7.3
Sierra Madre (connected)	6	7.3
Sierra Madre (San Fernando)	6	6.7
Simi-Santa Rosa	9	6.9
Oak Ridge (Onshore)	10	7.2
Oak Ridge (connected)	10	7.4
Verdugo	11	6.9

Table 4.6-1. List of Earthquake Faults

Fault Name	Closest Distance from Project Site (in miles)	Maximum Magnitude
San Cayetano	13	7.2
San Andreas	22	7.9

Sources: Appendix E.

Based on the Alquist-Priolo Earthquake Fault Zoning Act, only those faults that have direct evidence of movement within the last 11,700 years are required to be zoned. The CGS considers fault movement within this period a characteristic of faults that have a relatively high potential for ground rupture in the present or future. As discussed in Section 4.6.2, Regulatory Framework, the Alquist-Priolo Earthquake Fault Zoning Act requires the State Geologist to establish earthquake fault zones around the surface traces of active faults and to issue appropriate maps to assist cities and counties in planning, zoning, and building regulation functions. These zones, which generally extend 200 to 500 feet on each side of a known active fault based on location, precision, complexity, or regional significance of the fault, identify areas where potential surface fault rupture along an active fault could prove hazardous and identify where special studies are required to characterize hazards to habitable structures. If a site intended for human occupancy lies within an earthquake fault zone on an official CGS map, a geologic fault rupture investigation must be performed before issuance of permits to demonstrate that the proposed development is not threatened by surface displacement from the fault. There are no Holocene-active faults that intersect the project or within close proximity to the site.

According to forecasting by UCERF3, a collaborative effort between the U.S. Geological Survey, Southern California Earthquake Center, and CGS, there is a 93% chance of a magnitude 6.7 earthquake or greater occurring in the Southern California region by 2045 (USGS 2015). The southern segment of the San Andreas is considered to have the highest probability of being the source of this earthquake at 19%. The severity of groundshaking that would be caused by a seismic event in the region of the project site would depend on a variety of factors including distance to the source, depth, duration of shaking, and characteristics of underlying materials. Based on the proximity of the Northridge and San Fernando earthquakes, as well as the relative proximity to the San Andreas Fault, seismic parameters determined for the project site resulted in an anticipated peak ground acceleration (PGA) of 1.00g (percent gravity) (Appendix E). For perspective, the PGA values associated with the Northridge earthquake in 1994, approached 1.00g.

Liquefaction/Lateral Spreading

Liquefaction occurs when partially saturated soil enters a liquid state, resulting in the soil's inability to support overlying structures. Liquefaction typically occurs in areas where the groundwater is less than 50 feet from the surface and where the soils are composed of poorly consolidated fine to medium sand. Lateral spreading, related to liquefaction, consists of lateral movement of gently to steeply sloping saturated soil deposits that is caused by earthquake-induced liquefaction. The Seismic Hazards Mapping Act of 1990 directs the California Department of Conservation, Division of Mines and Geology (now the CGS) to identify and mitigate seismic hazards. Based on the Seismic Hazards Zone Map for the Oat Mountain quadrangle, the project site is located in an area considered susceptible to liquefaction (Appendix E). A project-specific liquefaction analysis, including completion of borings, laboratory testing, and engineering analysis, indicated that the maximum seismic-induced ground settlement associated with liquefaction could be 11 inches, if no measures are taken to improve the conditions (Appendix E).

Landslides

Landslides or slope failures include many phenomena that involve the downslope displacement and movement of material, triggered either by gravity or seismic forces. Exposed bedrock slopes may experience rockfalls, rockslides, rock avalanches, and deep-seated rotational slides, and soil slopes may experience soil slumps and rapid debris flows. Slope stability can depend on a number of complex variables, including the geology, structure, and amount of groundwater, as well as external processes such as climate, topography, slope geometry, and human activity. The factors that contribute to slope movements include those that decrease the resistance in the slope materials and those that increase the stresses on the slope. Slope failure can occur on slopes of 15% or less, but the probability is greater on steeper slopes that exhibit old landslide features such as scarps, slanted vegetation, and transverse ridges.

The project site is predominately relatively level with gentle slopes toward the west. However, the eastern portion of the site that includes the proposed Lot 6, an open space lot, as well as areas offsite further up the ridge have steeper inclines. Based on the Seismic Hazards Zone Map for the project region, Lot 6 and areas further east offsite are within an area identified as susceptible to earthquake-induced landslides. However, the site-specific geotechnical analysis indicated that no known landslides are located or observed on the project site (Appendix E).

Debris flows, consisting of a moving mass of heterogeneous debris lubricated by water, are generated by shallow soil slips in response to heavy rainfall. Debris flows only occur during heavy rainfall. In general, improvements most susceptible to potential debris flows are those lots located directly below and adjacent to natural slopes.

Subsidence

Land subsidence is the downward settlement of a large area of land, which can potentially result in surface infrastructure damage. Historical subsidence in California has resulted from several processes, including oil and gas production, groundwater withdrawal, hydrocompaction, and peat oxidation. Subsidence associated with water or gas withdrawal occurs when compressible subsurface deposits are depressurized as a result of removing water or gas and can no longer support the weight of the overlying material. In the case of groundwater withdrawal, subsidence occurs primarily when groundwater withdrawal from confined aquifers results in the depressurization and dewatering of compressible clay layers. Subsidence generally occurs slowly, and can continue for a period of several years after pumping has terminated, as water continues to migrate from compressible clay layers. The project site is not underlain by an oil field nor were any oil wells identified during the geotechnical investigation (Appendix E). The only groundwater well identified at the site was one inactive water well at the southern portion of the site (Appendix E).

Expansive Soil

Expansive soils are characterized by a tendency to experience volumetric changes (shrink and swell) that correspond to cyclical changes in soil moisture. Repeated shrinking and swelling of the soil can over time lead to stress that eventually damages structures, foundations, pavements, and other associated facilities. Expansive soils owe their characteristics to the presence of swelling clay minerals. The on-site alluvial soils are expected to have a low to very low potential for expansion.

Paleontology

Environmental Science Associates (ESA) requested a paleontological records search from the Natural History Museum of Los Angeles County (NHMLA) on January 23, 2020 and the results were received on February 6, 2020.

The NHMLA reported no fossil localities from within the Project site. Localities were however reported from the same sedimentary deposits, in nearby locations, either on the surface or at depth.

Recent alluvial deposits (Holocene, <11,700 years ago) tend not to be old enough to preserve paleontological resources and therefore have low paleontological sensitivity, however, these units can be underlain at depth by older Quaternary (Pleistocene, approximately 11,700 – 2.6 million years ago) alluvial deposits that may contain fossils. Therefore, these alluvial deposits will range from low to high paleontological sensitivity that increases at depth. The Los Angeles County Museum (LACM) has reported four nearby localities (LACM 5745, 3397, 7152, and 1733) in older Quaternary deposits underlying recent alluvial deposits at a relatively shallow depth. These localities produced fossil specimens of mastodon (*Mammut*), horse (*Equus*), bison (*Bison*), and mammoth (*Mammuthus*) (McLeod 2020).

The Plio-Pleistocene (approximately 11,700 years ago – 5.3 million years ago) Saugus Formation has a well-established fossil record, with the NHMLA reporting five nearby localities: LACM 1293, 6803-6804, 6063, and 6062. These localities produced fossils of camel (Camelidae), horse (*Equus*), alligator lizard (*Gerrhonotus*), rabbit (Leporidae), pocket mouse (*Perognathus*), and pocket gopher (*Thomomys*) (McLeod 2020).

Previously recorded localities coupled with the older age of this formation give it high paleontological sensitivity.

4.6.2 Regulatory Framework

Federal

U.S. Geological Survey Landslide Hazard Program

In fulfillment of the requirements of Public Law 106-113, the U.S. Geological Survey created the Landslide Hazard Program in the mid-1970s. According to the U.S. Geological Survey, the primary objective of the National Landslide Hazards Program is to reduce long-term losses from landslide hazards by improving our understanding of the causes of ground failure and suggesting mitigation strategies (USGS 2024). The federal government takes the lead role in funding and conducting this research, whereas the reduction of losses due to geologic hazards is primarily a state and local responsibility.

Paleontological Resources Protection Act of 2009

The Paleontological Resources Protection Act (PRPA) of 2009 directs the Secretaries of the Interior and Agriculture to manage and protect paleontological resources on federal land using "scientific principles and expertise." The PRPA incorporates most of the recommendations of the Secretary of the Interior's report titled Assessment of Fossil Management on Federal and Indian Lands (DOI 2000) in order to formulate a consistent paleontological resources management framework. 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 U.S. Bureau of Land Management, National Park Service, U.S. Forest Service, Bureau of Reclamation, and the U.S. Fish and Wildlife Service, and provides the following:

 Criminal and civil penalties for illegal sale and transport and theft and vandalism of fossils from federal lands

- Minimum requirements for paleontological resource-use permit issuance (terms, conditions, and qualifications of applicants)
- Definitions for "paleontological resources" and "casual collecting"
- Requirements for curation of federal fossils in approved repositories

The PRPA requires the Secretaries of the Interior and Agriculture to manage and protect paleontological resources on federal land. The PRPA furthers the protection of fossils on federal lands by criminalizing the unauthorized removal of fossils.

The Federal Land Policy Management Act of 1976 (P.L. 94-579; 90 Statute 2743, USC 1701-1782)

The Federal Land Policy Management Act requires that public lands be managed such that the quality of their scientific values is protected. The act recognizes significant paleontological resources as scientific resources and requires federal agencies to manage public lands in a manner that protects scientific resource quality.

The National Environmental Policy Act of 1969 (P.L. 91-190; 31 Statute 852, 42 USC 4321-4327)

The National Environmental Policy Act requires that important natural aspects of our national heritage be considered in determining the environmental consequences of any proposed project.

State

The statewide minimum public safety standard for mitigation of earthquake hazards, as established through the California Building Standards Code (CBSC), Alquist-Priolo Earthquake Fault Zoning Act, and the Seismic Hazards Mapping Act, is that the minimum level of mitigation for a project should reduce the risk of ground failure during an earthquake to a level that does not cause the collapse of buildings for human occupancy.¹ But in most cases, this safety standard is not required to prevent or avoid the ground failure itself. It is not feasible to design all structures to completely avoid damage in worst-case earthquake scenarios. Accordingly, regulatory agencies have generally defined an acceptable level of risk as that which provides reasonable protection of the public safety, although it does not necessarily ensure continued structural integrity and functionality of a project (14 CCR 3721[a]). Nothing in these acts, however, precludes lead agencies from enacting more stringent requirements, requiring a higher level of performance, or applying these requirements to developments other than those that meet the acts' definitions of "project."

Alguist-Priolo Earthquake Fault Zoning Act

The Alquist-Priolo Act was enacted in 1972 to mitigate the hazard of surface faulting to structures for human occupancy. In accordance with this act, the State Geologist established regulatory zones, called "earthquake fault zones," around the surface traces of active faults and has published maps showing these zones. Earthquake fault zones are designated by the California Geological Survey (CGS) and are delineated along traces of faults where mapping demonstrates surface fault rupture has occurred within the past 11,700 years. Construction within these zones cannot be permitted until a geologic investigation has been conducted to prove that a building planned for human occupancy would not be constructed across an active fault. These types of site evaluations address the precise location and recency of rupture along traces of the faults and are typically based on observations made in

¹ A "structure for human occupancy" is any structure used or intended for supporting or sheltering any use or occupancy, which is expected to have a human occupancy rate of more than 2,000 person-hours per year.

trenches excavated across fault traces. The project is not located on a site designated to be an active earthquake fault zone.

Seismic Hazards Mapping Act

The Seismic Hazards Mapping Act of 1990 (Public Resources Code section 2690, et seq.) directs the CGS to protect the public from earthquake-induced liquefaction and landslide hazards (note that these hazards are distinct from fault surface rupture hazard regulated by the Alquist-Priolo Act). This act requires the State Geologist to delineate various seismic hazard zones and requires cities, counties, and other local permitting agencies to regulate certain development projects within these zones (i.e., zones of required investigation). Before a development permit may be granted for a site within a Seismic Hazard Zone, a geotechnical investigation of the site must be conducted and appropriate mitigation measures incorporated into the project design. Evaluation and mitigation of potential risks from seismic hazards within zones of required investigation must be conducted in accordance with CGS Special Publication 117A, adopted March 13, 1997, by the State Mining and Geology Board, as updated in 2008.

California Building Standards Code

The CBSC is codified in the California Code of Regulations as Title 24, Part 2. Title 24 is administered by the California Building Standards Commission, which is responsible for coordinating all building standards. Under California law, all building standards must be centralized in Title 24 or those standards are not enforceable. The purpose of the CBSC is to establish minimum standards to safeguard the public health, safety, and general welfare through structural strength, means of egress facilities, and general stability, by regulating and controlling the design, construction, quality of materials, use and occupancy, location, and maintenance of all building and structures within its jurisdiction.

Chapters 16 and 16A of the 2022 CBSC include structural design requirements governing seismically resistant construction, including (but not limited to) factors and coefficients used to establish seismic site class and seismic occupancy category for the soil/rock at the building location and the proposed building design. Chapters 18 and 18A include (without limitation) the requirements for foundation and soil investigations (Sections 1803 and 1803A); excavation, grading, and fill (Sections 1804 and 1804A); damp-proofing and water-proofing (Sections 1805 and 1805A); allowable load-bearing values of soils (Sections 1806 and 1806A); the design of foundation walls, retaining walls, embedded posts and poles (Sections 1807 and 1807A), and foundations (Sections 1808 and 1808A); and design of shallow foundations (Sections 1809 and 1809A) and deep foundations (Sections 1810 and 1810A). Chapter 33 of the 2019 CBC includes (but is not limited to) requirements for safeguards at work sites to ensure stable excavations and cut or fill slopes (Section 3304).

Construction activities are subject to occupational safety standards for excavation and trenching, as specified in the California Safety and Health Administration regulations (Title 8 of the California Code of Regulations) and in Chapter 33 of the CBSC. These regulations specify the measures to be used for excavation and trench work where workers could be exposed to unstable soil conditions. The proposed project would be required to employ these safety measures during excavation and trenching.

Occupational Safety and Health Administration Regulations

Excavation and trenching are among the most hazardous construction operations. In California, the California Occupational Safety and Health Administration has responsibility for implementing state standards that have been determined to be as effective as federal rules relevant to worker safety, including slope protection during

construction excavations. The California Occupational Safety and Health Administration's requirements are more restrictive and protective than federal Occupational Safety and Health Administration standards.

California Environmental Quality Act

The CEQA Guidelines require that all private and public activities not specifically exempted be evaluated against the potential for environmental damage, including effects to paleontological resources. Paleontological resources, which are limited, nonrenewable resources of scientific, cultural, and educational value, are recognized as part of the environment under these state guidelines. This study satisfies project requirements in accordance with CEQA (Public Resources Code (PRC) section 21000, et seq.).

Paleontological resources are explicitly afforded protection by CEQA, specifically in Section VII(f) of CEQA Guidelines Appendix G, the "Environmental Checklist Form," which addresses the potential for adverse impacts to "unique paleontological resource[s] or site[s] or ... unique geological feature[s]." This provision covers fossils of signal importance – remains of species or genera new to science, for example, or fossils exhibiting features not previously recognized for a given animal group – as well as localities that yield fossils significant in their abundance, diversity, preservation, and so forth.

PRC Section 5097.5

The PRC Section 5097.5 regulates removal of paleontological resources from state lands, defines unauthorized removal of fossil resources as a misdemeanor, and requires mitigation of disturbed sites.

Local

2035 County of Los Angeles General Plan Update EIR

The 2035 County of Los Angeles General Plan Update EIR (updated 2015) CUL-5 (paragraphs 1, 2 and 4) states:

"Prior to the issuance of any grading permit, applicants shall provide written evidence to the County of Los Angeles that a County-certified paleontologist has been retained to observe grading activities greater than six feet in depth and salvage and catalogue paleontological resources as necessary. The paleontologist shall be present at the pregrade conference, shall establish procedures for paleontologist resource surveillance, and shall establish, in cooperation with the applicant, procedures for temporarily halting or redirecting work to permit the sampling, identification, and evaluation of the artifacts as appropriate.

If the paleontological resources are found to be significant, the paleontologist observer shall determine appropriate actions, in cooperation with the project applicant, for exploration and/or salvage. Prior to the release of the grading bond the applicant shall obtain approval of the paleontologist's follow-up report from the County. The report shall include the period of inspection, an analysis of any artifacts found and the present repository of the artifacts. Applicant shall prepare excavated material to the point of identification.

Unanticipated discoveries shall be evaluated for significance by a County-certified a paleontologist. If the paleontological resources are found to be significant, then the project shall be required to perform data recovery, professional identification, radiocarbon dates as applicable, and other special studies; submit materials to the County of Los Angeles, or its designee, on a first refusal basis and provide a comprehensive final report including appropriate records for the California Department of Parks and Recreation."

4.6.3 Thresholds of Significance

In accordance with Appendix G of the CEQA Guidelines and the *California Building Industry* Association v. Bay Area Air Quality Management District decision, a significant impact related to geology and soils would occur if the project would:

- 1. Directly or indirectly cause potential adverse effects, including the risk of loss, injury, or death involving:
 - a. 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 based on other substantial evidence of as known fault.
 - b. Strong seismic ground shaking.
 - c. Seismic-related ground failure, including liquefaction.
 - d. Landslides.
- 2. Result in substantial soil erosion or the loss of topsoil.
- Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse.
- 4. Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating direct or indirect risks to life or property.
- 5. Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems, where sewers are not available for the disposal of wastewater.
- 6. Directly or indirectly destroy a unique paleontological resource on site or unique geologic feature.

Additionally, the City of Santa Clarita (City) Local Guidelines (2005) include the following additional City-specific threshold related to geology and soils, in which a significant impact would occur if the project would involve:

7. Movement or grading of earth exceeding 100,000 cubic yards.

4.6.4 Impact Analysis

Threshold GEO-1: Would the project directly or indirectly cause potential adverse effects, including the risk of loss, injury, or death involving: rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area based on other substantial evidence of as known fault. (Refer to Division of Mines and Geology Special Publication 42); strong seismic ground shaking; seismic-related ground failure, including liquefaction; or landslides?

a. Alquist-Priolo Earthquake Faults

As detailed above in Section 4.6.1, the project site is located in a seismically active region with numerous Holocene-active faults within 20 miles of the project site. However, no Alquist-Priolo Earthquake Fault Zones are located within or immediately close to the project site. **No impacts** would occur with respect to surface fault rupture.

b. Seismic Ground Shaking

As mentioned above, the project site is located in an area of high seismic activity. According to the USGS, there is a 93% chance of a magnitude 6.7 or greater earthquake occurring in the Southern California region by 2045 (USGS 2015). If not designed appropriately, the proposed project could be subject to substantive damage and risk injury or death of occupants due to ground shaking from one of these regional faults. The amount of ground shaking would depend on a number of different factors including magnitude of the event, distance to the source, depth of displacement, duration of shaking, and the characteristics of the underlying materials. According to the geotechnical investigation, the peak ground acceleration could be as high as 1.00g, similar to values recorded during the 1994 Northridge earthquake which caused substantive damage.

The proposed project would be required to comply with the current CBSC and local amendments, which includes requirements to ensure that new development is designed to include seismic safety measures. The 2022 CBSC design parameters are specifically tailored to minimize the risk of structure failure due to seismic hazards and include a requirement for a standard, project-specific geotechnical (also known as a soils investigation) report, as part of the building permit process (CBC Chapter 18 and 18A). A preliminary project-specific geotechnical report was prepared for the Project Site and is included as Appendix E of this EIR. In accordance with the CBSC, this geotechnical report provides specific recommendations related to soils and seismic engineering, including recommendations for remedial grading, foundation design, and retaining walls, thus minimizing the potential for structural distress as a result of seismically induced ground shaking. The CBSC requires compliance with these recommendations, thus minimizing the potential for structural damage during an earthquake. As with all development in the City, the City's plan check and building inspection procedures would ensure that the proposed project is constructed in accordance with CBC standards, including the seismic design recommendations provided in a final design-level geotechnical report that must be included into the final design plans of construction.

The project would be designed consistent with applicable CBSC regulations and local amendments, with respect to seismic engineering and would therefore be considered seismically safe. Constructing new structures within an earthquake-prone area would not, in and of itself, increase seismic risks in the project area. Therefore, development of the proposed project would not directly or indirectly cause or exacerbate adverse effects involving strong seismic ground shaking. Impacts would be **less than significant.** No mitigation is required.

c. Seismic-Ground Failure (Liquefaction)

Liquefaction is a geotechnical hazard that occurs when loose, unconsolidated saturated soils are subjected to ground shaking causing the pore pressure to exceed frictional forces resulting in the soil units behaving more like a liquid than a solid. Liquefaction hazards are generally considered to be highest in susceptible soils within 50 feet of ground surface. If susceptible soils are present, liquefaction can cause substantive damage. According to data reviewed during the preliminary geotechnical investigation, the project site is located within a Seismic Hazard Zone for susceptibility to liquefaction (Appendix E). The preliminary geotechnical evaluation determined that if not addressed appropriately during site preparations, the site could experience up to 11 inches of settlement due to liquefaction (Appendix E). However, all of the proposed improvements that would be associated with the project would be required to comply with the applicable version of the CBSC, along with local applicable amendments, as well as comply with CGS Special Publication 117A which includes requirements for addressing liquefaction hazards. These

requirements include incorporation of recommendations from a final design level project-specific geotechnical report, which would evaluate the potential for liquefaction and provide recommendations to incorporate design measures such as site preparations and foundation design measures to minimize the potential for structural damage caused by seismic-related ground failure such as liquefaction. Furthermore, development of the proposed project would not directly or indirectly cause or exacerbate adverse effects involving seismic related ground failure, including liquefaction. Therefore, impacts would be **less than significant**, and no mitigation is required.

d. Landslides

As previously discussed, the project site includes generally level site conditions with the exception of Lot 6, however that area of the project site does not include any improvements and is proposed as left being open space. In addition, no known landslides were identified on the project site during the geotechnical investigation (Appendix E). As a result, the findings of the geotechnical investigation determined that the potential for earthquake-induced slope failures to adversely affect the proposed improvements was remote. Therefore, based on the review of site conditions along with proposed plans which would be required to adhere to building code requirements, the potential for earthquake-induced landslides or slope failures is considered to be **less than significant**. No mitigation is required.

Threshold GEO-2: Would the project result in substantial soil erosion or the loss of topsoil?

Project grading would include substantial grading, and earthwork activities that could expose soils to the effects of wind and water erosion if not managed appropriately. However, the project applicant would be required to comply with South Coast Air Quality Management District Rule 403, Fugitive Dust, to minimize wind and water erosion at the site, as well as to prepare and implement a Stormwater Pollution Prevention Plan (SWPPP), in accordance with the National Pollutant Discharge Elimination System General Permit for Discharges of Storm Water Associated with Construction Activity and Land Disturbance Activities. The site-specific SWPPP would be prepared prior to earthwork activities and would be implemented during project construction. The SWPPP would include best management practices (BMPs) and erosion control measures to prevent pollution in stormwater discharge.

Typical BMPs that could be used during construction include erosion/sediment control measures such as silt fences, fiber rolls, gravel bags, stormwater inlet protection, soil stabilization measures, and street sweeping. The SWPPP would be subject to review and approval by the City. Additionally, all project construction activities are required to comply with the City's Engineering Services Division grading permit regulations, which require the implementation of grading and dust control measures, including a wet weather erosion control plan if construction occurs during the rainy season, as well as inspections to ensure that sedimentation and erosion is minimized.

Through compliance with these existing regulations, the project would not result in any significant impacts related to soil erosion during the construction phase. Additionally, during operations, most of the project site would be developed with impervious surfaces and landscaping, and all stormwater flows would be directed to storm drain features, resulting in no contact with bare soil surfaces. Therefore, project impacts related to soil erosion or the loss of topsoil are considered **less than significant**, and no mitigation is required.

Threshold GEO-3: Would the project be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?

The project site is underlain by alluvial deposits and some areas of minor artificial fill. If not addressed appropriately, areas of the site may not adequately support the proposed improvements. However, the site was evaluated in a site-specific preliminary geotechnical investigation that considered the breadth of geotechnical hazards present including characteristics of underlying materials, topography, potential for liquefaction, lateral spreading, subsidence, and collapse. The project site is relatively level throughout the areas of proposed development. As discussed above, Lot 6 includes steeper inclines but has no proposed development and would be left as open space. The potential for liquefaction including lateral spreading is discussed above in Threshold GEO-1. Adherence to applicable building code requirements would reduce impacts related to liquefaction to less than significant levels. The Project Site is not located in an area of historical or current recorded subsidence due to groundwater pumping or oil extraction such that the potential for subsidence due to fluid withdrawal is remote (Appendix E). The geotechnical evaluation of the Project also determined that with implementation of site preparations including earthwork and recompaction of loose soils consistent with building code requirements, the potential for subsidence would be reduced to less than significant levels (Appendix E). Furthermore, development of the proposed project would not directly or indirectly cause or exacerbate any adverse effects involving these seismic related hazards.

The proposed improvements would be required to comply with the most current CBSC and applicable local amendments, which includes requirements to ensure that new development would not cause or exacerbate geological and soil hazards, including unstable soils and collapsible soils (e.g., by ensuring that underlying materials can adequately support the loadings (i.e., weight) of new structures). These requirements include incorporation of recommendations from a final design level project-specific geotechnical report, which would include recommendations for grading, engineered fills, foundation design, and retaining walls, if warranted. Adherence to building code requirements would also ensure that all proposed improvements associated with the project are evaluated for potential unstable soils and that recommendations for site preparations (e.g., soil compaction) and/or building foundation designs to minimize the potential for settlement are incorporated into final project design plans. Compliance with these recommendations would minimize the potential for structural damage associated with potentially unstable soils. In addition, project development would not create unstable conditions related to unstable soils. Therefore, impacts would be less than significant, and no mitigation is required.

Threshold GEO-4: Would the project be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?

Expansive soils, if present, can adversely affect improvements over time through cyclical volumetric changes that can crack foundations, pathways, and other improvements. However, according to the preliminary geotechnical investigations of the project site, the underlying soils of the site that would come in contact with foundation layers have a low to very low potential for expansion (Appendix E). As part of adherence to current building code requirements, the final design level geotechnical investigation would be required prior to approval of a building permit and would be required to evaluate for the presence of expansive soils. Recommendations from this final design level geotechnical report would include measures to address expansive soils, as appropriate, which could include treatment of soils or use of engineered fill. Therefore, with adherence to current building code requirements, the potential impact related to expansive soils would be **less than significant**, and no mitigation is required.

Threshold GEO-5: Would the project have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?

The proposed project would tie into existing sewer infrastructure and would not include septic tanks or alternative wastewater disposal systems. As a result, there would be **no impact** related to this criterion.

Threshold GEO-6: Would the project directly or indirectly destroy a unique paleontological resource on site or unique geologic feature?

The proposed project would not impact any known unique geologic features or paleontological resources but has the potential to impact unanticipated fossils resources at depth where older geological units are present. Although the potential to encounter fossil resources from recent alluvial deposits is relatively low, these sediments are underlain by older alluvial deposits that have increased paleontological sensitivity at depth. These older alluvial deposits and the Plio-Pleistocene Saugus Formation have a high potential for containing fossil resources due to their older age and from previously recorded fossil localities from the same and/or similar sediments found outside of the proposed Project area. As such, in the unlikely event that resources are encountered, **potentially significant** impacts could occur. For this reason, mitigation measures MM-GEO-1 through MM-GEO-4 are required.

Threshold GEO-7: Would the project result in the movement or grading of earth exceeding 100,000 cubic yards?

Project construction would include substantial grading, including up to 44,000 cubic yards of cut and 59,000 cubic yards of fill. In addition, approximately 85,000 cubic yards of soil would be imported onsite. Grading would be followed by construction of foundations, vertical building construction, paving/concrete, and landscape installation. Each of these project-related activities would result in exposing soils to potential erosion, which in turn could result in siltation of the nearby Sand Canyon Creek, Oak Spring Creek, and downstream Santa Clara River.

However, as discussed above in Threshold GEO-2, the project applicant would be required to comply with South Coast Air Quality Management District Rule 403, Fugitive Dust, to minimize wind and water erosion at the site, as well as to prepare and implement a SWPPP, in accordance with the National Pollutant Discharge Elimination System General Permit for Discharges of Storm Water Associated with Construction Activity and Land Disturbance Activities. The site-specific SWPPP would be prepared prior to earthwork activities and would be implemented during project construction. The SWPPP would include BMPs and erosion control measures to prevent pollution in stormwater discharge.

Typical BMPs that could be used during construction include erosion/sediment control measures such as silt fences, fiber rolls, gravel bags, stormwater inlet protection, soil stabilization measures, and street sweeping. The SWPPP would be subject to review and approval by the City for compliance with the Los Angeles County Public Works Construction Site Best Management Practices Manual (PW 2010). Additionally, all project construction activities are required to comply with the City's Engineering Services Division grading permit regulations, which require the implementation of grading and dust control measures, including a wet weather erosion control plan if construction occurs during the rainy season, as well as inspections to ensure that sedimentation and erosion is minimized.

Through compliance with these existing regulations, the project would not result in any significant impacts related to soil erosion during the construction phase. Additionally, during operations, most of the project site would be developed with impervious surfaces and landscaping, and all stormwater flows would be directed to storm drain

features, resulting in no contact with bare soil surfaces. Therefore, project impacts related to soil erosion or the loss of topsoil are considered **less than significant**. No mitigation is required.

4.6.5 Mitigation Measures

The following mitigation measures (MMs) would ensure that the project has a less-than-significant impact on geology and soils.

- MM-GEO-1 Paleontological Resource Monitoring. Retain Qualified Paleontologist. Before starting construction activities, the developer must retain a Qualified Paleontologist that meets the standards of the Society for Vertebrate Paleontology (SVP) (2010) to carry out all mitigation measures related to paleontological resources.
- MM-GEO-2 Paleontological Resources Sensitivity Training. Before any person commences ground disturbing activities, the Qualified Paleontologist must conduct pre-construction worker paleontological resources sensitivity training. The training must include information on what types of paleontological resources could be encountered during excavations, what to do in case an unanticipated discovery is made by a worker, and laws protecting paleontological resources. All construction personnel must be informed of the possibility of encountering fossils and instructed to immediately inform the construction foreman or supervisor if any bones or other potential fossils are unexpectedly unearthed in an area where a paleontological monitor is not present. The developer must ensure that construction personnel are made available for and attend the training and retain documentation demonstrating attendance.
- MM-GEO-3 Paleontological Monitoring. The Qualified Paleontologist must supervise a paleontological monitor meeting the SVP standards (2010) and be present during all excavations extending beyond a depth of 5 feet. Monitoring must consist of visually inspecting fresh exposures of rock for larger fossil remains and, where appropriate, collecting wet or dry screened standard sediment samples (up to 4.0 cubic yards) of promising horizons for smaller fossil remains (SVP 2010). Per the SVP standards (2010), once 50 percent of excavations or other ground disturbing activities are complete within geologic units assigned high paleontological sensitivity and no fossils are identified, monitoring can be reduced to part-time inspections or ceased entirely if determined adequate by the Qualified Paleontologist in consultation with the City's Project Manager. Monitoring activities must be documented in a Paleontological Resources Monitoring Report to be prepared by the Qualified Paleontologist at the completion of construction and be provided to the City within six months of Project completion. If fossil resources are identified during monitoring, the report will also be filed with the Natural History Museum of Los Angeles County.
- MM-GEO-4 Inadvertent Discoveries. If a paleontological resource is discovered during construction, the paleontological monitor is empowered to temporarily divert or redirect grading and excavation activities in the area of the exposed resource to facilitate evaluation of the discovery. An appropriate buffer area must be established by the Qualified Paleontologist around the find where construction activities shall not be allowed to continue. Work may be allowed to continue outside of the buffer area. At the Qualified Paleontologist's discretion and to reduce any construction delay, the grading and excavation contractor must assist in removing rock samples for initial processing and evaluation of the find. All significant fossils must be collected by the paleontological monitor

and/or the Qualified Paleontologist. Collected fossils must be prepared to the point of identification and catalogued before they are submitted to their final repository. Any fossils collected must be curated at a public, non-profit institution with a research interest in the materials, such as the Natural History Museum of Los Angeles County, if such an institution agrees to accept the fossils. If no institution accepts the fossil collection, they may be donated to a local school in the area for educational purposes. Accompanying notes, maps, and photographs must also be filed at the repository and/or school.

4.6.6 Level of Significance After Mitigation

Threshold GEO-6: Would the project directly or indirectly destroy a unique paleontological resource on site or unique geologic feature?

As indicated by the NHMLA Records Search results there are no fossil localities that lie directly within the project site; however, there are fossil localities nearby from the same sedimentary deposits that occur in the project site, either at the surface or at depth. Therefore, the project would not impact known paleontological resources. Deep excavation that involves disturbance of native soils could result in the disturbance and/or destruction of paleontological resources that may be present in deeper Pleistocene alluvial deposits and the Saugus Formation that underlie the project. Due to the potential to impact unknown resources, potential impacts associated with construction would be significant. However, implementation of MM-GEO-1 requiring the retention of a qualified paleontologist prior to the initiation of grading activities, MM-GEO-2 requiring sensitivity and awareness training, MM-GEO-3 requiring monitoring, and MM-GEO-4 outlining procedures to following in the event of inadvertent discovered would reduce this potential impact to a less than significant level.

4.6.7 Cumulative Effects

Potential cumulative impacts related to geology and soils would result if cumulative projects would combine to create or exacerbate geologic hazards, including seismicity, erosion/loss of topsoil, or unstable geologic conditions. The majority of geologic hazards, such as liquefaction, landslides, and unstable soils, tend to be site-specific with conditions changing, sometimes substantially, over relatively short distances and are therefore generally reduced to the extent practicable on a project-by-project basis through adherence to building code requirements. Each cumulative project, as identified within Table 3-4 of this EIR would be required to adhere to the same required building engineering design standards as the proposed project, per the most recent version of the CBSC, to ensure the safety of building occupants and thus avoiding a cumulative geologic hazard. Construction for each of these cumulative projects would also be required to implement erosion control best management practices (BMPs) similar to that of the proposed project to reduce the potential for erosion or loss of topsoil. Additionally, as needed, cumulative projects would incorporate individual mitigation or geotechnical measures that are appropriate for sitespecific conditions present on each individual cumulative project site. Therefore, since geologic hazards tend to be site-specific and do not combine to become cumulatively considerable but would all adhere to current building code requirements, would ensure that the project would not combine with other cumulative projects. Consequently, the proposed project would not contribute to a significant cumulative impact associated with geology and soils. The impact would be less than significant.

4.6.8 References Cited

- CGS (California Geological Survey). 2018. Earthquake Zones of Required Investigation web application, https://maps.conservation.ca.gov/cgs/EQZApp/,accessed February 23, 2024.
- City of Santa Clarita. 2005. Local Guidelines and Procedures for Implementation of the Provisions of the California Environmental Quality Act as Adopted by City Council for the City of Santa Clarita Pursuant to Resolution 05-38 on April 26, 2005.
- DOI (U.S. Department of the Interior). 2000. Assessment of Fossil Management on Federal and Indian Lands.
- McLeod, S.A. 2020. Paleontological resources for the proposed Wiley Canyon (Smiser Ranch) Mixed-Use Project, in the City of Santa Clarita, Los Angeles County. February 6, 2020. Unpublished Records Search Results Letter from the Natural History Museum of Los Angeles County, Los Angeles, California.
- PlaceWorks. 2015. Los Angeles County General Plan Update Final Environmental Impact Report. Update March 2015.
- PW. 2010. Los Angeles County Department of Public Works. "Construction Site Best Management Practices (BMPs) Manuel. http://dpw.lacounty.gov/cons/specs/bmpmanual.pdf, accessed February 23, 2024.
- SCEDC (Southern California Earthquake Data Center). 2022. "Significant Earthquakes and Faults". https://scedc.caltech.edu/earthquake/chronological.html, accessed November 8, 2022.
- SVP (Society of Vertebrate Paleontology). 2010. Standard Procedures for the Assessment and Mitigation of Adverse Impacts to Paleontological Resources. http://vertpaleo.org/PDFS/68/68c554bb-86f1-442f-a0dc-25299762d36c.pdf.
- USGS. 2015. UCERF3: A New Earthquake Forecast for California's Complex Fault System. Fact Sheet 2015-3009, March 2015.
- USGS. 2024. Landslide Hazards Program. https://www.usgs.gov/programs/landslide-hazards, accessed February 23, 2024.

Fault Classification **Recency of Movement** Historic Holocene Late Quaternary Quaternary **Quaternary Faults** — fault, approx. located — fault, certain ···· fault, concealed → thrust fault, certain → thrust fault, approx. located · → thrust fault, concealed — sinistral fault, certain -- sinistral fault, approx. located ···· thrust fault, concealed (2) fault, certain (ball and bar)

— fault, certain (dip)

- reverse fault, certain

Pre-Quaternary Faults

-- fault, approx. located

→ thrust fault, certain

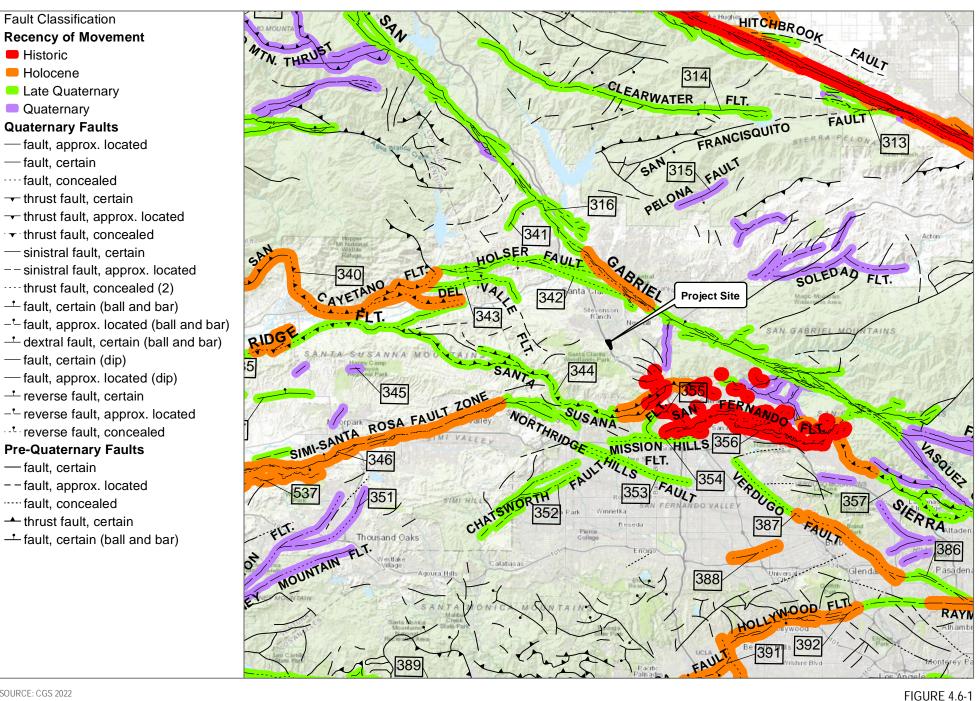
fault, certain (ball and bar)

— fault, certain

···· fault, concealed

— fault, approx. located (dip)

- reverse fault, approx. located reverse fault, concealed



SOURCE: CGS 2022

DUDEK 20,000 40,000 Feet **Regional Faults** Wiley Canyon Project INTENTIONALLY LEFT BLANK

4.7 Greenhouse Gas Emissions

This section describes the existing setting of the proposed Wiley Canyon Mixed-Use Project (project) site related to greenhouse gas (GHG) emissions and climate change, identifies associated regulatory requirements, evaluates potential impacts, and identifies mitigation measures related to implementation of the proposed project. The analysis within this section is based on the GHG Technical Report prepared for the project and included within Appendix G of this EIR.

4.7.1 Environmental Setting

4.7.1.1 Greenhouse Effect and Greenhouse Gases

Global climate change refers to changes in average climatic conditions on Earth as a whole, including changes in temperature, wind patterns, precipitation, and storms. Historical records indicate that global climate changes have occurred in the past due to natural phenomena; however, data indicates that the current global conditions differ from past climate changes in rate and magnitude. The current changes in global climate have been attributed to anthropogenic (human-caused) activities by the Intergovernmental Panel on Climate Change (IPCC 2014a). The term GHG refers to gases that trap long-wave radiation or heat in the atmosphere, which heats the surface of the Earth. Without human intervention, the Earth maintains an approximate balance between the GHG emissions in the atmosphere and the storage of GHGs in the oceans and terrestrial ecosystems. GHGs are the result of both natural and anthropogenic activities. Forest fires, decomposition, industrial processes, landfills, and consumption of fossil fuels for power generation, transportation, heating, and cooking are the primary sources of GHG emissions.

The Federal Government and State of California recognized that anthropogenic GHG emissions are contributing to changes in the global climate, and that such changes are having and will have adverse effects on the environment, the economy, and public health. While worldwide contributions of GHG emissions are expected to have widespread consequences, it is not possible to link particular changes to the environment of California or elsewhere to GHGs emitted from a particular source or location. In other words, emissions of GHGs have the potential to cause global impacts rather than local impacts. Increased concentrations of GHGs in the Earth's atmosphere have been linked to global climate change and such conditions as rising surface temperatures, melting icebergs and snowpack, rising sea levels, and the increased frequency and magnitude of severe weather conditions (IPCC 2014a). Existing climate change models also show that climate warming portends a variety of impacts on agriculture, including loss of microclimates that support specific crops, increased pressure from invasive weeds and diseases, and loss of productivity due to changes in water reliability and availability (CNRA 2018). In addition, rising temperatures and shifts in microclimates associated with global climate change are expected to increase the frequency and intensity of wildfires (USGCRP 2018).

California law defines GHGs to include the following compounds: carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF_6) (see e.g., *CEQA Guidelines* Section 15364.5 and Health and Safety Code Section 38505(g)). The most common GHG that results from human activity is CO_2 , which represents 76 percent of total anthropogenic GHG emissions in the atmosphere (as of 2010 data) (IPCC 2014a), followed by CH_4 and N_2O . Scientists have established a Global Warming Potential (GWP) to gauge the potency of each GHG's ability to absorb and re-emit long-wave radiation and these GWP ratios are available from the IPCC. The GWP of a gas is determined using CO_2 as the reference gas with a GWP of 1 over 100 years. For example, a gas with a GWP of 10 is 10 times more potent than CO_2 over 100 years. The sum of each

GHG multiplied by its associated GWP is referred to as carbon dioxide equivalents (CO_2e). The measurement unit CO_2e is used to report the combined potency of GHG emissions.

Historically, GHG emission inventories have been calculated using the GWPs from the IPCC's Second Assessment Report (SAR). In 2007, the IPCC updated the GWP values based on the latest science at the time in its Fourth Assessment Report (AR4). The updated GWPs in the IPCC AR4 have begun to be used in recent GHG emissions inventories. In 2013, the IPCC again updated the GWP values based on the latest science in its Fifth Assessment Report (AR5) (IPCC 2013). However, United Nations Framework Convention on Climate Change (UNFCCC) reporting guidelines for national inventories require the use of GWP values from the AR4. To comply with international reporting standards under the UNFCCC, official emission estimates for California and the U.S. are reported using AR4 GWP values. Therefore, statewide and national GHG inventories have not yet updated their GWP values to the AR5 values. By applying the GWP ratios, project-related CO₂e emissions can be tabulated in metric tons per year. Typically, the GWP ratio corresponding to the warming potential of CO₂ over a 100-year period is used as a baseline. Compounds that are regulated as GHGs are discussed below and their respective GWPs are summarized in Table 4.7-1, Regulated Greenhouse Gas's Reported GWP Values.

Table 4.7-1. Regulated Greenhouse Gas's Reported GWP Values

Regulated GHG Compound	IPCC SAR GWP	IPCC AR4 GWP	IPCC AR5 GWP
Carbon Dioxide (CO ₂)	1	1	1
Methane (CH ₄)	21	25	28
Nitrous Oxide (N ₂ O)	310	298	265
Hydrofluorocarbons (HFCs)	140 to 11,700	124 to 14,800	138 to 12,400
Perfluorocarbons (PFCs)	6,500 to 9,200	7,390 to 17,700	6,630 to 17,400
Sulfur Hexafluoride (SF ₆)	23,900	22,800	23,500

Source: IPCC. 2014. Climate Change 2014: Synthesis Report. Contribution of Working Groups I, II and III to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change, https://www.ipcc.ch/report/ar5/syr/. Accessed: October 29, 2021.

Carbon Dioxide (CO₂): CO₂ is the most abundant GHG in the atmosphere and is primarily generated from fossil fuel combustion from stationary and mobile sources. CO₂ is the reference gas (GWP of 1) for determining the GWPs of other GHGs.

Methane (CH₄): CH₄ is emitted from biogenic sources (i.e., resulting from the activity of living organisms), incomplete combustion in forest fires, landfills, manure management, and leaks in natural gas pipelines. The GWP of CH₄ is 21 in the IPCC SAR, 25 in the IPCC AR4, and 28 in the IPCC AR5.

Nitrous Oxide (N_2O): N_2O produced by human-related sources including agricultural soil management, animal manure management, sewage treatment, mobile and stationary combustion of fossil fuel, adipic acid production, and nitric acid production. The GWP of N_2O is 310 in the IPCC SAR, 298 in the IPCC AR4, and 265 in the IPCC AR5.

Hydrofluorocarbons (HFCs): HFCs are fluorinated compounds consisting of hydrogen, carbon, and fluorine. They are typically used as refrigerants in both stationary refrigeration and mobile air conditioning systems. The GWPs of HFCs ranges from 140 for HFC-152a to 11,700 for HFC-23 in the IPCC SAR, 124 for HFC-152a to 14,800 for HFC-23 in the IPCC AR4, and 138 for HFC-152a to 12,400 for HFC-23 in the IPCC AR5.

Perfluorocarbons (PFCs): PFCs are fluorinated compounds consisting of carbon and fluorine. They are primarily created as a byproduct of aluminum production and semiconductor manufacturing. The GWPs of PFCs range from 6,500 to 9,200 in the IPCC SAR, 7,390 to 17,700 in the IPCC AR4, and 6,630 to 17,400 in the IPCC AR5.

Sulfur Hexafluoride (SF₆): SF₆ is a fluorinated compound consisting of sulfur and fluoride. It is a colorless, nontoxic, nonflammable gas. It is most commonly used as an electrical insulator in high voltage equipment that transmits and distributes electricity. SF₆ has a GWP of 23,900 in the IPCC SAR, 22,800 in the IPCC AR4, and 23,500 in the IPCC AR5.

Nitrogen Trifluoride (NF₃): NF₃ is a fluorinated compound consisting of nitrogen and fluoride. It is an inorganic, colorless, non-flammable, toxic gas with a slightly musty odor. NF₃ is a chemical released in some high-tech industries, including in the manufacture of many electronics and semi-conductors. NF₃ has a GWP of 17,200 in the IPCC AR4, and 16,100 in the IPCC AR5.

4.7.1.2 Contributions to Greenhouse Gas Emissions

The California Air Resources Board (CARB) compiles the State's GHG emissions inventory. The most updated inventory is referred to as the 2021 edition, which reports the State's GHG emissions inventory from calendar year 2019. Based on the 2019 GHG inventory data (i.e., the latest year for which data are available from CARB), California emitted 418.2 million metric tons of CO₂e (MMTCO₂e) including emissions resulting from imported electrical power (CARB 2021a). Between April 2010 and July 2020, the population of California grew by an annualized rate of 0.64 percent to a total of 39.78 million (California Department of Finance 2020). In addition, the carbon intensity of California's economy (the amount of carbon pollution per million dollars of gross domestic product (GDP)) is declining. From 2000 to 2019, the carbon intensity of California's economy decreased by 45 percent while the GDP increased by 63 percent (CARB 2021a). According to CARB, as of 2016, statewide GHG emissions dropped below the 2020 GHG Limit (431 MMTCO₂e) and have remained below the Limit since that time.

Table 4.7-2, State of California Greenhouse Gas Emissions, identifies and quantifies statewide anthropogenic GHG emissions and sinks (e.g., carbon sequestration due to forest growth) in 1990 and 2019. As shown in the table, the transportation sector is the largest contributor to statewide GHG emissions at 40 percent in 2019.

Table 4.7-2. State of California Greenhouse Gas Emissions

Category	Total 1990 Emissions (MMTCO ₂ e)	Percent of Total 1990 Emissions	Total 2019 Emissions (MMTCO ₂ e)	Percent of Total 2019 Emissions
Transportation	150.7	35%	166.1	39.7%
Electric Power	110.6	26%	58.8	14.1%
Commercial	14.4	3%	15.9	3.8%
Residential	29.7	7%	27.9	6.7%
Industrial	103.0	24%	88.2	21.1%
Recycling and Waste ^a	-	-	8.9	2.1%
High GWP/Non-Specified ^b	1.3	<1%	20.6	4.9%
Agriculture/Forestry	23.6	6%	31.8	7.6%
Forestry Sinks ^c	-6.7	_	_ c	_
Net Total (IPCC SAR)	426.6	100%	-	_
Net Total (IPCC AR4) d	431	100%	418.2	100%

Source: CARB 2021a.

- a Included in other categories for the 1990 emissions inventory.
- High GWP gases are not specifically called out in the 1990 emissions inventory.
- ^c Forestry sinks were not calculated for 2019 pending a revised methodology under development. Forestry sinks are ecosystems carbon stored in plants and soils.
- d CARB revised the State's 1990 level GHG emissions using GWPs from the IPCC AR4.

The latest GHG inventory for the City of Santa Clarita is provided in the 2012 CAP. The 2005 baseline emission inventory for the City of Santa Clarita is shown below in Table 4.7-3, *City of Santa Clarita Greenhous Gas Emissions*. It should be noted that the emissions shown in Table 4.7-3 for the City are in units of metric tons (MT) whereas the emissions shown in Table 4.7-2 for the State are in units of million metric tons (MMT).

Table 4.7-3. City of Santa Clarita Greenhouse Gas Emissions

Category	Total 2005 Emissions (MTCO₂e)	Percent of Total ^a
Transportation	1,065,718	62.0
Building and Industrial	531,611	30.9
Waste	50,439	2.9
Water	49,641	2.9
Agricultural	11,619	0.7
Lighting	8,615	0.5
Refrigerant	5	0.0
Total	1,717,648	100

Source: City of Santa Clarita 2012.

4.7.1.3 Potential Effects to the Environment and Human Health Due to Climate Change

The scientific community's understanding of the fundamental processes responsible for global climate change has improved over the past decade, and its predictive capabilities are advancing. However, there remain significant scientific uncertainties in, for example, predictions of local effects of climate change, occurrence, frequency, and magnitude of extreme weather events, effects of aerosols, changes in clouds, shifts in the intensity and distribution of precipitation, and changes in oceanic circulation. Due to the complexity of the Earth's climate system and inability to accurately model it, the uncertainty surrounding climate change may never be completely eliminated. Nonetheless, the IPCC, in its *Fifth* Assessment Report, Summary for Policy Makers, stated that, "it is extremely likely that more than half of the observed increase in global average surface temperature from 1951 to 2010 was caused by the anthropogenic increase in greenhouse gas concentrations and other anthropogenic forcings [sic] together" (IPCC 2014b). A report from the National Academy of Sciences concluded that 97 to 98 percent of the climate researchers most actively publishing in the field support the tenets of the IPCC in that climate change is very likely caused by human (i.e., anthropogenic) activity (Anderegg et al. 2010). In the most recent IPCC Sixth Assessment Report, Summary for Policy Makers, it states "It is unequivocal that human influence has warmed the atmosphere, ocean, and land" (IPCC 2021).

According to CARB, the potential impacts in California due to global climate change may include: loss in snow pack; sea level rise; more extreme heat days per year; more high ozone days; more large forest fires; more drought years; increased erosion of California's coastlines and sea water intrusion into the Sacramento and San Joaquin Deltas

Column may not add due to rounding.

and associated levee systems; and increased pest infestation (Cal EPA 2006). Below is a summary of some of the potential effects that could be experienced in California as a result of global warming and climate change.

Air Quality

Higher temperatures, conducive to air pollution formation, could worsen air quality in California. Climate change may increase the concentration of ground-level ozone, but the magnitude of the effect and, therefore, its indirect effects, are uncertain. If higher temperatures are accompanied by drier conditions, the potential for large wildfires could increase, which, in turn, would exacerbate air quality. Additionally, severe heat accompanied by drier conditions and poor air quality could increase the number of heat-related deaths, illnesses, and asthma attacks throughout the State (Cal EPA 2013). However, if higher temperatures are accompanied by wetter, rather than drier conditions, the rains would temporarily clear the air of particulate pollution and reduce the incidence of large wildfires, thus ameliorating the pollution associated with wildfires.

In 2018, the California Natural Resources Agency (CNRA) published the Safeguarding California Plan: 2018 Update, as a continuation of the policy vision Governor's Executive Order S-13-2008 and the 2009 CNRA California Climate Adaptation Strategy (CNRA 2018). The CNRA plan lists specific actions and recommendations for State and local agencies to best adapt to the anticipated risks posed by a changing climate. In accordance with the 2009 CNRA California Climate Adaptation Strategy, the California Energy Commission (CEC) developed the Cal-Adapt website, which became operational in 2011, that synthesizes climate change scenarios and impacts to benefit local decision makers (CNRA 2009). As stated in the CNRA Safeguarding California Plan: 2018 Update, "the Cal-Adapt.org web portal is at the forefront of resources for specific communities to understand how climate change will raise temperatures and exacerbate extreme heat events, drought, snowpack loss, wildfire, and coastal flooding." The information provided on the Cal-Adapt website represents a projection of potential future climate scenarios. The data are comprised of the average values (i.e., temperature, sea-level rise, snowpack) from a variety of scenarios and models and are meant to illustrate how the climate may change based on a variety of different potential social and economic factors. According to the Cal-Adapt website's "Local Climate Change Snapshot" database (Cal-Adapt 2022), the City could see an average annual increase in maximum temperature to 81.4 °F to 82.4 °F in the midcentury (2035-2064) and 82.6 °F to 85.9 °F at the end of the century (2070-2099) compared to 76.9 °F for the baseline period (1961-1990). The average annual number of extreme heat days could also increase to 15 to 20 days in the mid-century (2035-2064) and 21 to 40 days at the end of the century (2070-2099) compared to 2 days for the baseline period (1961-1990).

Water Supply

Uncertainty remains with respect to the overall impact of global climate change on future water supplies in California. Studies have found that, "Considerable uncertainty about precise impacts of climate change on California hydrology and water resources will remain until we have more precise and consistent information about how precipitation patterns, timing, and intensity will change" (PISD 2003). For example, some studies identify little change in total annual precipitation in projections for California while others show significantly more precipitation (PISD 2003). Warmer, wetter winters would increase the amount of runoff available for groundwater recharge; however, this additional runoff would occur at a time when some basins are either being recharged at their maximum capacity or are already full (PISD 2003). Conversely, a reduced snowpack coupled with increased rainfall during winters could lead to reductions in spring runoff and higher evapotranspiration because of higher temperatures could reduce the amount of water available for recharge (PISD 2003). According to the Cal-Adapt

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The Cal-Adapt website address is: http://cal-adapt.org.

website's "Local Climate Change Snapshot" database (Cal-Adapt 2022), the City could see an average annual length of dry spells of 143 to 144 days in the mid-century (2035–2064) and 143 to 151 days at the end of the century (2070–2099) compared to 133 days for the baseline period (1961–1990). The average annual precipitation could decrease to 16.2 inches in the mid-century (2035–2064) and 16.3 to 16.5 inches at the end of the century (2070–2099) compared to 16.7 inches for the baseline period (1961–1990).

The California Department of Water Resources report on climate change and effects on the State Water Project (SWP), the Central Valley Project, and the Sacramento-San Joaquin Delta, concludes that "climate change will likely have a significant effect on California's future water resources...[and] future water demand." It also reports that "much uncertainty about future water demand [remains], especially [for] those aspects of future demand that will be directly affected by climate change and warming. While climate change is expected to continue through at least the end of this century, the magnitude and, in some cases, the nature of future changes is uncertain" (DWR 2006). It also reports that the relationship between climate change and its potential effect on water demand is not well understood, but "[i]t is unlikely that this level of uncertainty will diminish significantly in the foreseeable future." Still, changes in water supply are expected to occur, and many regional studies have shown that large changes in the reliability of water yields from reservoirs could result from only small changes in inflows (DWR 2006). In its *Fifth Assessment Report*, the IPCC states "Changes in the global water cycle in response to the warming over the 21st century will not be uniform. The contrast in precipitation between wet and dry regions and between wet and dry seasons will increase, although there may be regional exceptions" (IPCC 2014b). The *Sixth Assessment Report* further states, "Continued global warming is projected to further intensify the global water cycle, including its variability, global monsoon precipitation and the severity of wet and dry events" (IPCC 2021).

Hydrology and Sea Level Rise

As discussed above, climate change could potentially affect: the amount of snowfall, rainfall and snow pack; the intensity and frequency of storms; flood hydrographs (flash floods, rain or snow events, coincidental high tide and high runoff events); sea level rise and coastal flooding; coastal erosion; and the potential for salt water intrusion. Sea level rise can be a product of global warming through two main processes: expansion of seawater as the oceans warm and melting of ice over land. A rise in sea levels could result in coastal flooding and erosion and could jeopardize California's water supply. Increased storm intensity and frequency could affect the ability of flood-control facilities, including levees, to handle storm events.

Agriculture

California has a \$30-billion agricultural industry that produces half the country's fruits and vegetables. Higher CO₂ levels can stimulate plant production and increase plant water-use efficiency. However, if temperatures rise and drier conditions prevail, water demand could increase; crop-yield could be threatened by a less reliable water supply; and greater ozone pollution could render plants more susceptible to pest and disease outbreaks. In addition, temperature increases could change the time of year certain crops, such as wine grapes, bloom or ripen, and thus affect their quality (CCCC 2006).

Ecosystems and Wildlife

Increases in global temperatures and the potential resulting changes in weather patterns could have ecological effects on a global and local scale. Increasing concentrations of GHGs are likely to accelerate the rate of climate change. Scientists expect that the average global surface temperature could rise by 2°F-11.5°F (1.1°C-6.4°C) by 2100, with significant regional variation (NRC 2010). Soil moisture is likely to decline in many regions, and

intense rainstorms are likely to become more frequent. Sea level could rise as much as 2 feet along most of the United States coastline. Rising temperatures could have four major impacts on plants and animals: (1) timing of ecological events; (2) geographic range; (3) species' composition within communities; and (4) ecosystem processes such as carbon cycling and storage (Parmesan and Galbraith 2004).

4.7.2 Regulatory Framework

Federal

The United States Environmental Protection Agency (USEPA) is responsible for implementing federal policy to address GHGs. The federal government administers a wide array of public-private partnerships to reduce the GHG intensity generated in the United States. These programs focus on energy efficiency, renewable energy, methane and other non-CO₂ gases, agricultural practices, and implementation of technologies to achieve GHG reductions. The USEPA implements numerous voluntary programs that contribute to the reduction of GHG emissions. These programs (e.g., the Energy Star labeling system for energy-efficient products) encourage voluntary reductions by large corporations, consumers, industrial and commercial buildings, and many major industrial sectors.

Clean Air Act

In Massachusetts v. Environmental Protection Agency (2007) 549 U.S. 497, the U.S. Supreme Court that the USEPA has statutory authority under Section 202 of the federal Clean Air Act (CAA) to regulate GHGs. The court did not hold that the USEPA was required to regulate GHG emissions; however, it indicated that the agency must decide whether GHGs cause or contribute to air pollution that is reasonably anticipated to endanger public health or welfare. On December 7, 2009, the USEPA Administrator signed two distinct findings regarding GHGs under Section 202(a) of the CAA. The USEPA adopted a Final Endangerment Finding for the six defined GHGs (CO₂, CH₄, N₂O, HFCs, PFCs, and SF₆) on December 7, 2009. The Endangerment Finding is required before USEPA can regulate GHG emissions under Section 202(a)(1) of the CAA consistently with the United States Supreme Court decision. The USEPA also adopted a Cause or Contribute Finding in which the USEPA Administrator found that GHG emissions from new motor vehicle and motor vehicle engines are contributing to air pollution, which is endangering public health and welfare. These findings do not, by themselves, impose any requirements on industry or other entities. However, these actions were a prerequisite for implementing GHG emissions standards for vehicles.

Energy Independence and Security Act

The Energy Independence and Security Act of 2007 (EISA) facilitates the reduction of national GHG emissions by requiring the following:

- Increasing the supply of alternative fuel sources by setting a mandatory Renewable Fuel Standard (RFS) that requires fuel producers to use at least 36 billion gallons of biofuel in 2022;
- Prescribing or revising standards affecting regional efficiency for heating and cooling products, procedures
 for new or amended standards, energy conservation, energy efficiency labeling for consumer electronic
 products, residential boiler efficiency, electric motor efficiency, and home appliances;
- Requiring approximately 25 percent greater efficiency for light bulbs by phasing out incandescent light bulbs between 2012 and 2014; requiring approximately 200 percent greater efficiency for light bulbs, or similar energy savings, by 2020; and

While superseded by the USEPA and National Highway Traffic Safety Administration (NHTSA) actions described above, (i) establishing miles per gallon targets for cars and light trucks and (ii) directing the NHTSA to establish a fuel economy program for medium- and heavy-duty trucks and create a separate fuel economy standard for trucks.

Additional provisions of EISA address energy savings in government and public institutions, promote research for alternative energy, additional research in carbon capture, international energy programs, and the creation of green jobs.²

Executive Order 13432

In response to the *Massachusetts v. Environmental Protection Agency* ruling, the President signed Executive Order 13432 on May 14, 2007, directing the USEPA, along with the Departments of Transportation, Energy, and Agriculture, to initiate a regulatory process that responds to the Supreme Court's decision. Executive Order 13432 was codified into law by the 2009 Omnibus Appropriations Law signed on February 17, 2009. The order sets goals in the areas of energy efficiency, acquisition, renewable energy, toxics reductions, recycling, sustainable buildings, electronics stewardship, fleets, and water conservation.

Light-Duty Vehicle Greenhouse Gas and Corporate Average Fuel Economy Standards

On May 19, 2009, President Obama announced a national policy for fuel efficiency and emissions standards in the United States auto industry. In August 2012, standards were adopted for model year 2017 through 2025 passenger cars and light-duty trucks. By 2020, new vehicles are projected to achieve 41.7 mpg (if GHG reductions are achieved exclusively through fuel economy improvements) and 213 grams of CO₂ per mile (Phase II standards). By 2025, vehicles will achieve 54.5 mpg (if GHG reductions are achieved exclusively through fuel economy improvements) and 163 grams of CO₂ per mile. According to the USEPA, under these standards a model year 2025 vehicle would emit one-half of the GHG emissions from a model year 2010 vehicle (USEPA and NHTSA 2012). In 2017, the USEPA recommended no change to the GHG standards for light-duty vehicles for model years 2022–2025.

In August 2018, the USEPA and NHTSA proposed the Safer Affordable Fuel-Efficient Vehicles Rule that would, if adopted, maintain the CAFE and CO₂ standards applicable in model year 2020 for model years 2021 through 2026. The estimated CAFE and CO₂ standards for model year 2020 are 43.7 mpg and 204 grams of CO₂ per mile for passenger cars and 31.3 mpg and 284 grams of CO₂ per mile for light trucks, projecting an overall industry average of 37 mpg, as compared to 46.7 mpg under the standards issued in 2012. The proposal, if adopted, would also exclude CO₂-equivalent emission improvements associated with air conditioning refrigerants and leakage (and, optionally, offsets for nitrous oxide and methane emissions) after model year 2020 (NHTSA and USEPA 2018). The proposed Safer Affordable Fuel-Efficient Vehicles Rule's public comment period was extended to October 26, 2018 (NHTSA 2018). As of March 31, 2020, the SAFE Vehicles Rule, issued by NHTSA and USEPA, was finalized and set fuel economy and CO₂ standards that increase 1.5% in stringency each year for model years 2021 through 2026 for passenger cars and light trucks. (This is less stringent than the 2012 proposed standard, which would have required increases of 5% each year.) The anticipated average required fuel economy would be 40.4 mpg by model year 2026 (NHTSA 2018).

On January 20, 2021, President Biden issued Executive Order 13990 "Protecting Public Health and the Environment and Restoring Science To Tackle the Climate Crisis" directing EPA to consider whether to propose

A green job, as defined by the United States Department of Labor, is a job in business that produces goods or provides services that benefit the environment or conserve natural resources.

suspending, revising, or rescinding the standards previously revised under the "The Safer Affordable Fuel-Efficient (SAFE) Vehicles Rule for Model Years 2021–2026 Passenger Cars and Light Trucks," promulgated in April 2020. As of August 2021, the USEPA is proposing to revise the GHG standards to be more stringent than the SAFE rule standards in each model year from 2023 through 2026. USEPA is also proposing to include several flexibilities to incentivize the production and sale of vehicles with zero and near-zero emissions technology to reduce compliance costs and to address the lead time of the proposed standards (USEPA 2021).

Heavy-Duty Engines and Vehicles Fuel Efficiency Standards

On October 25, 2010, the USEPA and the United States Department of Transportation (USDOT) proposed the first national standards to reduce GHG and improve fuel efficiency of heavy-duty trucks and buses (also known as "Phase 1"). For combination tractors, the agencies are proposing engine and vehicle standards that begin in the 2014 model year and achieve up to a 20 percent reduction in carbon dioxide emissions and fuel consumption by the 2018 model year. For heavy-duty pickup trucks and vans, the agencies are proposing separate gasoline and diesel truck standards, which phase in starting in the 2014 model year and achieve up to a 10 percent reduction for gasoline vehicles and up to a 15 percent reduction for diesel vehicles by 2018 model year (12% and 17% respectively if accounting for air conditioning leakage). Lastly, for vocational vehicles (includes other vehicles like buses, refuse trucks, concrete mixers; everything except for combination tractors and heavy-duty pickups and vans), the agencies are proposing engine and vehicle standards starting in the 2014 model year, which would achieve up to a 10 percent reduction in fuel consumption and carbon dioxide emissions by the 2018 model year. Building on the success of the standards, the USEPA and USDOT jointly finalized additional standards (called "Phase 2") for medium- and heavy-duty vehicles through model year 2027 that will improve fuel efficiency and cut carbon pollution. The final standards are expected to lower CO₂ emissions by approximately 1.1 billion metric tons.

State

California has promulgated a series of executive orders, laws, and regulations aimed at reducing both the level of GHGs in the atmosphere and emissions of GHGs from commercial and private activities within the State.

California Greenhouse Gas Reduction Targets

Assembly Bill 32 (California Global Warming Solutions Act of 2006) and Senate Bill 32 (Emissions Limit)

In 2006, the California State Legislature adopted Assembly Bill (AB) 32 (codified in Health and Safety Code [HSC], Division 25.5 – California Global Warming Solutions Act of 2006), which focuses on reducing GHG emissions in California to 1990 levels by 2020. AB 32 defines GHGs as CO₂, CH₄, N₂O, HFCs, PFCs, and SF₆ and represents the first enforceable Statewide program to limit emissions of these GHGs from all major industries with penalties for noncompliance. The law further requires that reduction measures be technologically feasible and cost effective. Under AB 32, CARB has the primary responsibility for reducing GHG emissions. AB 32 required CARB to adopt rules and regulations directing State actions that would achieve GHG emissions reductions equivalent to 1990 Statewide levels by 2020.

In 2016, the California State Legislature adopted Senate Bill (SB) 32 and its companion bill AB 197, and both were signed by Governor Brown to update AB 32 and include an emissions reduction's goal for the year 2030. SB 32 and AB 197 amend AB 32 and establish a new climate pollution reduction target of 40 percent below 1990 levels by 2030 and include provisions to ensure the benefits of State climate policies reach into disadvantaged

communities. SB 32 suggests approaches to achieving the new reduction target, which include increasing renewable energy use, imposing tighter limits on the carbon content of gasoline and diesel fuel, putting more electric cars on the road, improving energy efficiency, and curbing emissions from key industries. Since 2016, two more scoping plans have been adopted. The 2017 Climate Change Scoping Plan and the most recent scoping plan, the 2022 Scoping Plan for Achieving Carbon Neutrality are discussed below.

2017 Climate Change Scoping Plan

In response to the 2030 GHG reduction target, CARB adopted the 2017 Climate Change Scoping Plan (2017 Scoping Plan) at a public meeting held in December 2017 (CARB 2017a). The 2017 Scoping Plan outlines the strategies the State will implement to achieve the 2030 GHG reduction target, which build on the Cap-and-Trade Regulation, the Low Carbon Fuel Standards (LCFS), improved vehicle, truck and freight movement emissions standards, increasing renewable energy, and strategies to reduce methane emissions from agricultural and other wastes by using it to meet California's energy needs. CARB's projected Statewide 2030 emissions takes into account 2020 GHG reduction policies and programs. The 2017 Scoping Plan also comprehensively addresses GHG emissions from natural and working lands of California, including the agriculture and forestry sectors. The adopted 2017 Scoping Plan includes ongoing and statutorily required programs and continuing the Cap-and-Trade Program. This Scoping Plan Scenario was modified from the January 2017 Proposed Scoping Plan to reflect AB 398.³

CARB states that the Scoping Plan Scenario "is the best choice to achieve the State's climate and clean air goals" (CARB 2017a). Under the Scoping Plan Scenario, the majority of the reductions would result from the continuation of the Cap-and-Trade regulation. Additional reductions are achieved from electricity sector standards (i.e., utility providers to supply at least 50 percent renewable electricity by 2030), doubling the energy efficiency savings at end uses, additional reductions from the LCFS, implementing the short-lived GHG strategy (e.g., hydrofluorocarbons), and implementing the mobile source strategy and sustainable freight action plan. The alternatives were designed to consider various combinations of these programs, as well as consideration of a carbon tax in the event the Cap-and-Trade regulation is not continued. However, in July 2017, the California Legislature voted to extend the Cap-and-Trade regulation to 2030.

The 2017 Scoping Plan discusses the role of local governments in meeting the State's GHG reductions goals because local governments have jurisdiction and land use authority related to: community-scale planning and permitting processes, local codes and actions, outreach and education programs, and municipal operations (CARB 2017a). Furthermore, local governments may have the ability to incentivize renewable energy, energy efficiency, and water efficiency measures (CARB 2017a).

Under the Scoping Plan Scenario, continuation of the Cap-and-Trade regulation (or carbon tax) is expected to cover approximately 34 to 79 MMTCO₂ of the 2030 reduction obligation (CARB 2017a). The short-lived GHG strategy is expected to cover approximately 17 to 35 MMTCO₂e. The Renewables Portfolio Standard with 50 percent renewable electricity by 2030 is expected to cover approximately 3 MMTCO₂. The mobile source strategy and sustainable freight action plan includes maintaining the existing vehicle GHG emissions standards, increasing the number of zero emission vehicles, and improving the freight system efficiency, and is expected to cover approximately 11 to 13 MMTCO₂. Under the Scoping Plan Scenario, CARB expects that the doubling of the energy efficiency savings by

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³ AB 398 was enacted in 2017 to extend and clarify the role of the State's Cap-and-Trade Program through December 31, 2030. As part of AB 398, refinements were made to the Cap-and-Trade program to establish updated protocols and allocation of proceeds to reduce GHG emissions.

Short-lived climate pollutants include methane, fluorinated gases, and black carbon. These GHGs are much more potent than carbon dioxide and can have detrimental effects on human health and climate change (CARB 2017b).

2030 would cover approximately 7 to 9 MMTCO₂ of the 2030 reduction obligation. The other strategies would be expected to cover the remaining 2030 reduction obligations.

Assembly Bill 1279 (The California Climate Crisis Act)

The Legislature enacted AB 1279 (California Legislative Information 2022a), The California Climate Crisis Act, on September 16, 2022. AB 1279 establishes the policy of the State to achieve net zero GHG emissions, carbon neutrality, as soon as possible, but no later than 2045 and achieve and maintain net negative GHG emissions thereafter. Additionally, AB 1279 ensures that by 2045 Statewide anthropogenic greenhouse gas emissions are reduced at least 85 percent below 1990 levels. SB 1279 also requires CARB to ensure that the Scoping Plan identifies and recommends measures to achieve carbon neutrality, and to identify and implement policies and strategies for carbon dioxide removal solutions and carbon capture, utilization, and storage technologies. It also requires CARB to submit an annual report on progress in achieving the Scoping Plan's goals.

2022 Scoping Plan for Achieving Carbon Neutrality

The 2022 Scoping Plan for Achieving Carbon Neutrality (2022 Scoping Plan), adopted by CARB in December 2022, expands on prior Scoping Plans and responds to more recent legislation by outlining a technologically feasible, costeffective, and equity-focused path to achieve the state's climate target of reducing anthropogenic emissions to 85 percent below 1990 levels and achieving carbon neutrality by 2045 or earlier (CARB 2022a). The 2022 Scoping Plan outlines the strategies the state will implement to achieve carbon neutrality by reducing GHGs to meet the anthropogenic target and by expanding actions to capture and store carbon through the state's natural and working lands and using a variety of mechanical approaches. The major element of the 2022 Scoping Plan is the decarbonization of every sector of the economy. This requires rapidly moving to zero-emission transportation for cars, buses, trains, and trucks; phasing out the use of fossil gas for heating; clamping down on chemicals and refrigerants; providing communities with sustainable options such as walking, biking, and public transit to reduce reliance on cars; continuing to build out solar arrays, wind turbine capacity, and other resources to provide clean, renewable energy to displace fossil-fuel fired electrical generation; scaling up new options such as renewable hydrogen for hard-to-electrify end uses and biomethane where needed. "Successfully achieving the outcomes called for in the Scoping Plan would reduce demand for liquid petroleum by 94 percent and total fossil fuels by 86 percent by 2045 relative to 2022" (CARB 2022a). Despite these efforts, some amount of residual emissions will remain from hard-to-abate industries such as cement, internal combustion vehicles still on the road, and other sources of GHGs, including high global warming chemicals used as refrigerants. The 2022 Scoping Plan addresses the remaining emissions by re-envisioning natural and working lands (such as forests, shrublands/chaparral, croplands, wetlands, and other lands) to ensure they incorporate and store as much carbon as possible. Since working lands will not provide enough sequestration or carbon storage on their own to address the residual emissions, additional methods of capturing, removing, and storing carbon dioxide need to be explored, developed and deployed.

The 2022 Scoping Plan shows that the state must take unprecedented and substantial action to achieve its climate goals, far beyond anything CARB has considered in prior scoping plans. In CARB's own words, the 2022 Scoping Plan "is the most comprehensive and far-reaching Scoping Plan developed to date" and "[m]odeling for this Scoping Plan shows that this decade must be one of transformation on a scale never seen before to set us up for success

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⁵ Carbon neutrality means "net zero" emissions of GHGs. In other words, it means that GHG emissions generated by sources such as transportation, power plants, and industrial processes must be less than or equal to the amount of carbon dioxide that is stored, both in natural sinks and through mechanical sequestration. AB 1279 uses the terminology net zero and the 2022 Scoping Plan uses the terminology carbon neutrality or carbon neutral. These terms mean the same thing and are used interchangeably.

in 2045" (CARB 2022a). The 2022 Scoping Plan includes the Scoping Plan Scenario, which "builds on and integrates efforts already underway to reduce the state's GHG, criteria pollutant, and toxic air contaminant emissions by identifying the clean technologies and fuels that should be phased in as the state transitions away from combustion of fossil fuels." (CARB 2022a). The 2022 Scoping Plan approaches decarbonization from two perspectives: (1) managing a phasedown of existing energy sources and technology and (2) ramping up, developing, and deploying alternative clean energy sources and technology over time (CARB 2022a). Key actions to support success of the 2022 Scoping Plan include, but are not limited to:

Transportation Sector

- Decarbonizing the transportation sector, including transitioning to 100 percent sales of light-duty zero emission vehicles (ZEVs) by 2035 and medium- and heavy-duty vehicles by 2040; achieving a 20 percent zero emission target for the aviation sector, and developing a rapid and robust network of ZEV refueling infrastructure.
- Ensuring that an adequate supply of zero-carbon alternative fuel which will require building the production and distribution network for zero-carbon fuels; strengthening the Cap-and-Trade Program; and increasing the stringency and scope of the Low Carbon Fuel Standard (LCFS).
- Achieving a per capita vehicle miles traveled (VMT) reduction of at least 25 percent below 2019 levels by 2030 and 30 percent below 2019 levels by 2045 by reimagining roadway projects to decrease VMT, investing in public transit, implementing equitable roadway pricing; expanding and completing planned networks of high-quality active transportation infrastructure; deploying autonomous vehicles, ride-hailing services, and other options which have higher occupancy and low VMT; streamlining access to public transportation; and ensuring alignment of land use, housing, transportation; conservation and planning in adopted regional plans and accelerating infill development and housing production in transportation efficient places.

Clean Electricity Grid

Long-term planning to support grid reliability and expansion of renewable and zero-carbon resource and infrastructure deployment; completing systemwide and local reliability assessments; facilitating resource development such as long-duration energy storage and hydrogen production; maximizing opportunities for demand response; enhancing decarbonization, reliability, and affordability in regional markets; addressing resource build-out challenges; and doubling statewide energy efficiency savings in electricity and fossil gas end uses by 2030; achieving 90 percent, 95 percent, and 100 percent renewable and zero-carbon retail sales by 2035, 2040, and 2045, respectively;

Sustainable Manufacturing and Buildings

Using best available control technology (BACT) for stationary sources; prioritizing alternative fuel transitions and pilot projects to identify options to reduce materials and process emissions along with energy emissions in industrial manufacturing facilities; strengthening the Cap-and-Trade Program; developing infrastructure for Carbon Capture Sequestration (CCS) and hydrogen production; establishing markets for low-carbon products and recycled materials; developing a net-zero cement strategy; incentivizing the installation of energy efficiency and renewable energy technologies; evaluating the role of hydrogen in meeting GHG reduction goals; and addressing cost barriers to promote low-carbon fuels for hard-to-electrify industrial applications.

Achieving three million all-electric and electric-ready homes by 2030 and seven million by 2035 with six million heat pumps installed by 2030; strengthening building standards to support zero-emission new construction and developing building performance standards for existing buildings and by adopting a zero-emission standard for new space and water heaters beginning in 2030; expanding use of low-GWP refrigerants within buildings; increasing funding to decarbonize existing buildings and appliance replacements; and implementing biomethane procurement targets for investor-owned utilities.

Carbon Dioxide Removal (CDR) and Capture

• Incorporating CCS into other sectors, besides transportation, where cost-effective and technologically feasible options are not currently available and to achieve the 85 percent reduction in anthropogenic sources below 1990 levels; addressing market barriers for CCS and CDR; evaluating the role for CCS in cement decarbonization; supporting carbon management infrastructure projects; exploring carbon capture applications; consider carbon capture infrastructure when developing hydrogen roadmaps; and streamlining permitting barriers to project implementation.

Short-Lived Climate Pollutants (Non-Combustion Gases)

- Installing anaerobic digesters, maximizing biomethane capture, and directing biomethane to sectors that are hard to decarbonize or as a feedstock for energy; increasing alternative manure management projects; implementing enteric fermentation strategies; accelerating demand for diary and livestock product substitutes such as plant-based or cell-cultured dairy and livestock products to achieve reductions in animal populations; and deploying methane migration strategies and developing regulations to ensure that the 2030 target is achieved.
- Maximizing and expanding existing infrastructure to reduce landfill disposal; expanding markets for products made from organic waste; recovering edible food to combat food insecurity; infrastructure to support organic recycling; and directing biomethane captured from landfills and organic waste digesters to sectors that are hard to decarbonize.
- Mitigating emissions from leaks; utilizing zero emission equipment alternatives wherever feasible; identifying and addressing methane leaks form oil infrastructure near communities; minimizing emission from equipment that must vent fossil gas by design; installing vapor collection systems on high emitting equipment; phasing out venting and routine flaring of associated gas; reducing pipeline and compressor blowdown emissions; utilizing remote sensing capability to mitigate leaks.
- Expanding the use of very low- or no-GWP technologies in all hydrofluorocarbon (HFC) end-use sectors; converting large HFC emitters such as existing refrigeration systems to the lowest practical GWP technologies; and improving recovery, reclamation, and reuse of refrigerants by limiting sales of new or virgin high-GWP refrigerants and requiring the use of reclaimed refrigerants.
- Reducing fuel combustion from reductions in transportation emissions and agricultural equipment emissions and investing in residential woodsmoke reduction.

Natural and Working Lands (NWL)

• Increasing climate smart forest, shrubland, and grassland management to at least 2.3 million acres a year—an approximately 10-fold increase from current levels; increasing climate smart agricultural practices by at least 78,000 acres adopted a year, annually conserving at least 8,000 acres a year of croplands, and increasing organic agriculture to comprise at least 20 percent of cultivated acres by 2045—an

approximately 7.5-fold increase in healthy soils practices from previous levels and a 2-fold increase in total acres of organic agriculture; increasing annual investment in urban trees in developed lands by at least 200 percent above historic levels and establishing defensible space on all parcels by 2045; restoring at least 60,000 acres, or approximately 15 percent of all Sacramento-San Joaquin River Delta wetlands by 2045; and cutting land conversion of deserts and sparsely vegetated landscapes by at least 50 percent annually from current levels, starting in 2025.

- Establishing and expanding mechanism that ensure NWL are protected from land conversion and parcelization and pairing land conservation projects with management plans that increase carbon sequestration.
- Accelerating the pace and scale of climate smart forest management to at least 2.3 million acres annually by 2025; establishing and expanding mechanisms that ensure forests, shrublands, and grasslands are protected from land conversion; accelerating the deployment of long-term carbon storage from waste woody biomass residues; expanding infrastructure to facilitate processing of biomass; and streamlining permitting to accelerate implementation of climate smart forest management.
- Establishing and expanding mechanisms that ensure grasslands are protected from conversion/ parcelization and that support ongoing management actions that improve carbon sequestration and to deliver waste diversion goals through nature-based solutions.
- Accelerating healthy soils practices to 80,000 acres annually by 2025, conserving at least 8,000 acres of annual crops annually, and increasing organic agriculture to 20 percent of all cultivated acres by 2045; accelerating deployment of healthy soils practices, organic farming, and climate smart agriculture practices.
- Restoring 60,000 acres of Delta wetlands annually by 2045 to reduce methane emissions from wetlands and reverse the resulting subsidence.
- Increasing urban forestry investment annually by 200 percent relative to business as usual.
- Establishing and expanding mechanisms that ensure sparsely vegetated lands are protected from conversion.

Under the Scoping Plan Scenario, the demand for liquid petroleum would decrease by 94 percent and total fossil fuels by 86 percent in 2045 relative to 2022 (CARB 2022b). Unfortunately, some residual emissions would remain from hard-to-abate industries such as cement, internal combustion vehicles still on the road, and other sources of GHGs, including high global warming chemicals used as refrigerants (CARB 2022b). The 2022 Scoping Plan addresses these remaining emissions through increased sequestration rates in NWL. However, the 2022 Scoping Plan modeling indicates that NWL, on their own, will not provide enough sequestration and storage to address all the residual emissions so it will be necessary to research, develop, and deploy additional methods of capturing CO₂ that include pulling it from smokestacks of facilities, or drawing it out of the atmosphere itself and then safely and permanently utilizing and storing it (CARB 2022b). Additionally, carbon removal will be necessary to achieve net negative emissions to address historical GHGs already in the atmosphere (CARB 2022b). The 2022 Scoping Plan does not specify how the residual emissions will be removed, as this will require new CCS and DAC technologies to be developed which will need governmental or other incentive support to overcome technology and market barriers (CARB 2022b).

The 2022 Scoping Plan also discusses the role of local governments in meeting the state's GHG reductions goals because local governments have jurisdiction and land use authority related to community-scale planning and permitting processes, local codes and actions, outreach and education programs, and municipal operations. Local governments' efforts to reduce GHG emissions within their jurisdictions are critical to achieving the State's long-

term climate goals. Furthermore, local governments make critical decisions on how and when to deploy transportation infrastructure and can choose to support transit, walking, bicycling, and neighborhoods that allow people to transition away from cars; they can adopt local building regulations that are more restrictive than statewide building code requirements; and they play a critical role in facilitating the rollout of ZEV infrastructure (CARB 2022a). The 2022 Scoping Plan encourages local governments to take ambitious, coordinated climate action at the community scale; action that is consistent with and supportive of the state's climate goals (CARB 2022a). These could include:

- Developing local CAPS and strategies consistent with the State's GHG emission reduction goals.
- Incorporating State-level GHG priorities into their processes for approving land use and individual plans and individual projects.
- Implementing CEQA mitigation, as needed, to reduce GHG emissions associated with new land use development projects, and
- Leveraging opportunities for regional collaboration.

Executive Order B-30-15

On April 29, 2015, Governor Brown issued Executive Order B-30-15, which involved the following:

- Established a new interim Statewide reduction target to reduce GHG emissions to 40 percent below 1990 levels by 2030.
- Ordered all State agencies with jurisdiction over sources of GHG emissions to implement measures to achieve reductions of GHG emissions to meet the 2030 and 2050 reduction targets.
- Directed CARB to update the Climate Change Scoping Plan to express the 2030 target in terms of million metric tons of carbon dioxide equivalent.

Executive Order B-55-18

Executive Order B-55-18 was signed by Governor Brown on September 10, 2018. The order establishes an additional Statewide policy to achieve carbon neutrality by 2045 and maintain net negative emissions thereafter. As per Executive Order B-55-18, CARB is directed to work with relevant State agencies to develop a framework for implementation and accounting that tracks progress toward this goal and to ensure future Climate Change Scoping Plans identify and recommend measures to achieve the carbon neutrality goal.

Senate Bill 1383

This bill (Chapter 395, Statutes of 2016) creates goals for short-lived climate pollutant (SLCP) reductions in various industry sectors. The SLCPs included under this bill – including methane, fluorinated gases, and black carbon – are GHGs that are much more potent than carbon dioxide and can have detrimental effects on human health and climate change. SB 1383 requires the CARB to adopt a strategy to reduce methane by 40%, hydrofluorocarbon gases by 40%, and anthropogenic black carbon by 50% below 2013 levels by 2030. The methane emission reduction goals include a 75% reduction in the level of statewide disposal of organic waste from 2014 levels by 2025. In 2017, CARB adopted a SLCP Reduction Strategy to implement SB 1383 (CARB 2017b).

Land Use and Transportation Planning

SB 375 (Chapter 728, Statutes of 2008), which establishes mechanisms for the development of regional targets for reducing passenger vehicle GHG emissions, was adopted by the State on September 30, 2008. Under SB 375, CARB is required, in consultation with the State's Metropolitan Planning Organizations, to set regional GHG reduction targets for the passenger vehicle and light-duty truck sector for 2020 and 2035. In February 2011, CARB adopted the GHG emissions reduction targets of 8 percent by 2020 and 13 percent by 2035 relative to 2005 GHG emissions for the Southern California Association of Governments (SCAG), which is the Metropolitan Planning Organization for the region in which the City is located (CARB 2018). Of note, the proposed reduction targets explicitly exclude emission reductions expected from the AB 1493 and the LCFS regulations.

Under SB 375, the reduction target must be incorporated within that region's Regional Transportation Plan (RTP), which is used for long-term transportation planning, in a Sustainable Communities Strategy (SCS). Certain transportation planning and programming activities would then need to be consistent with the SCS; however, SB 375 expressly provides that the SCS does not regulate the use of land, and further provides that local land use plans and policies (e.g., general plan) are not required to be consistent with either the RTP or SCS.

In addition, on September 3, 2020, SCAG adopted the 2020–2045 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) also known as the Connect SoCal, which is an update to the previous 2012–2035 RTP/SCS and 2016–2040 RTP/SCS (SCAG 2020a). Using growth forecasts and economic trends, Connect SoCal provides a vision for transportation throughout the region for the next 25 years. Connect SoCal successfully achieves and exceeds the GHG emission-reduction targets set by CARB. Connect SoCal is further discussed in *Regional*.

In March 2018, CARB updated the SB 375 targets to require 8 percent reduction by 2020 and a 19 percent reduction by 2035 in per capita passenger vehicle GHG emissions (CARB 2018). This reduction target has been integrated into the most recent 2020–2045 RTP/SCS, which is further discussed in *Regional*.

Transportation Fuel

In response to the transportation sector accounting for a large percentage of California's CO_2 emissions, AB 1493 (HSC Section 42823 and 43018.5) (also referred to as the Pavley standards), enacted on July 22, 2002, required CARB to set GHG emission standards for passenger vehicles, light duty trucks, and other vehicles whose primary use is non-commercial personal transportation manufactured in and after 2009. In setting these standards, CARB must consider cost effectiveness, technological feasibility, economic impacts, and provide maximum flexibility to manufacturers. The federal CAA ordinarily preempts state regulation of motor vehicle emission standards; however, California is allowed to set its own standards with a federal CAA waiver from the USEPA. In June 2009, the USEPA granted California the waiver.

However, as discussed previously, the USEPA and USDOT adopted federal standards for model year 2012 through 2016 light-duty vehicles, which corresponds to the vehicle model years regulated under the State's Pavley Phase I standards. In addition, the USEPA and USDOT have adopted GHG emission standards for model year 2017 through 2025 vehicles, which corresponds to the vehicle model years regulated under the State's Pavley Phase II standards. These standards are slightly different from the State's model year 2017 through 2025 standards, but the State of California has agreed not to contest these standards, in part, due to the fact that while the national standard would achieve slightly less reductions in California, it would achieve greater reductions nationally and is stringent enough to meet State GHG emission reduction goals. In 2012, CARB adopted regulations that allow manufacturers to comply with the 2017 through 2025 national standards to meet State law (i.e., the State's Pavley Phase II standards

still apply by law; however, meeting the national standards for model year 2017 through 2025 also meets State law). These 2012 standards were then overridden with the SAFE Vehicles Rule, which were finalized in 2020 by USEPA and NHTSA. In September 2019, the USEPA announced its decision to withdraw California's waiver of preemption under Section 209 of the Clean Air Act. This preemption was proposed to be repealed on April 22, 2021. On August 10, 2021, NHTSA proposed new I Standards for 2024–2026. The proposed rule would increase the stringency standards for light-duty vehicles for model years 2024–2026 from 1.5 percent per year to 8 percent per year (NHTSA 2021).

In May 2016, CARB released the updated Mobile Source Strategy that demonstrates how the State can simultaneously meet air quality standards, achieve GHG emission reduction targets, decrease health risk from transportation emissions, and reduce petroleum consumption over the next fifteen years, through a transition to zero-emission vehicles (ZEVs), cleaner transit systems and reduction of vehicle miles traveled. The Mobile Source Strategy calls for 1.5 million ZEVs (including plug-in hybrid electric, battery-electric, and hydrogen fuel cell vehicles) by 2025 and 4.2 million ZEVs by 2030. It also calls for more stringent GHG requirements for light-duty vehicles beyond 2025 as well as GHG reductions from medium-duty and heavy-duty vehicles and increased deployment of zero-emission trucks primarily for class 3 – 7 "last mile" delivery trucks in California. Statewide, the Mobile Source Strategy would result in a 45 percent reduction in GHG emissions, and a 50 percent reduction in the consumption of petroleum-based fuels (CARB 2016).

In January 2007, Governor Brown enacted Executive Order S-01-07, which mandates the following: (1) establish a Statewide goal to reduce the carbon intensity of California's transportation fuels by at least 10 percent by 2020; and (2) adopt an LCFS for transportation fuels in California. CARB identified the LCFS as one of the nine discrete early actions in the Climate Change Scoping Plan. The LCFS regulations were approved by CARB in 2009 and established a reduction in the carbon intensity of transportation fuels by 10 percent by 2020 with implementation beginning on January 1, 2011. In September 2015, CARB approved the re-adoption of the LCFS, which became effective on January 1, 2016, to address procedural deficiencies in the way the original regulation was adopted. In April 2017, the LCFS was brought before the Court of Appeal challenging the analysis of potential nitrogen dioxide impacts from biodiesel fuels. The Court directed CARB to conduct an analysis of nitrogen dioxide impacts from biodiesel fuels and froze the carbon intensity targets for diesel and biodiesel fuel provisions at 2017 levels until CARB has completed this analysis. On March 6, 2018, CARB issued its Draft Supplemental Disclosure Discussion of Oxides of Nitrogen Potentially Caused by the Low Carbon Fuel Standard Regulation (CARB 2019). CARB posted modifications to the amendments on August 13, 2018, with a public comment period through August 30, 2018. Final approval of regulatory changes from CARB's analysis of nitrogen dioxide impacts from biodiesel fuels was made on January 4, 2019 (CARB 2019). The 2017 Climate Change Scoping Plan also calls for increasing the mandatory reduction in carbon intensity of transportation fuels from 10 percent to 18 percent by 2030.

Energy

The California Energy Commission (CEC) first adopted Energy Efficiency Standards for Residential and Nonresidential Buildings (CCR, Title 24, Part 6) in 1978 in response to a legislative mandate to reduce energy consumption in the State. Although not originally intended to reduce GHG emissions, increased energy efficiency and reduced consumption of electricity, natural gas, and other fuels would result in fewer GHG emissions from residential and nonresidential buildings subject to the standard. The standards are updated periodically (typically every three years) to allow for the consideration and inclusion of new energy efficiency technologies and methods. The 2022 Energy Efficiency Standards for Residential and Nonresidential Buildings focuses on several key areas to improve the energy efficiency of newly constructed buildings and additions and alterations to existing buildings. The major efficiency improvements to the residential Standards involve requirements for solar photovoltaics for

low-rise residential, improvements for attics, walls, water heating, and lighting. The most significant efficiency improvements to the nonresidential Standards include alignment with the ASHRAE 90.1 2017 national standards. For residential and non-residential, the Standards include requirements high-efficiency air filters for certain buildings. The 2022 Energy Code encourages electric heat pumps, establishes electric-ready requirements for new homes, expands solar photovoltaic and battery storage standards, strengthens ventilation standards, and more (CEC 2022).

Part 11 of the Title 24 Building Energy Efficiency Standards is referred to as the California Green Building Standards (CALGreen) Code. The purpose of the CALGreen Code is to "improve public health, safety and general welfare by enhancing the design and construction of buildings through the use of building concepts having a reduced negative impact or positive environmental impact and encouraging sustainable construction practices in the following categories: (1) Planning and design; (2) Energy efficiency; (3) Water efficiency and conservation; (4) Material conservation and resource efficiency; and (5) Environmental air quality" (CBSC 2023). As of January 1, 2011, the CALGreen Code is mandatory for all new buildings constructed in the State. The CALGreen Code establishes mandatory measures for new residential and non-residential buildings. Such mandatory measures include energy efficiency, water conservation, material conservation, planning and design, and overall environmental quality. The CALGreen Code was updated in 2022 to include new mandatory measures for residential and nonresidential uses; the new measures took effect on January 1, 2023 (CBSC 2019).

The State has adopted regulations to increase the proportion of electricity from renewable sources. In November 2008, Governor Schwarzenegger signed Executive Order S-14-08 (Office of the Governor 2008), which expands the State's Renewables Portfolio Standard to 33 percent renewable power by 2020. On April 12, 2011, Governor Jerry Brown signed SB X1-2 to increase California's Renewables Portfolio Standard to 33 percent by 2020. SB 350 (Chapter 547, Statues of 2015) further increased the Renewables Portfolio Standard to 50 percent by 2030. The legislation also included interim targets of 40 percent by 2024 and 45 percent by 2027. On September 10, 2018, Governor Jerry Brown signed SB 100, which further increased California's Renewables Portfolio Standard and requires retail sellers and local publicly owned electric utilities to procure eligible renewable electricity for 44 percent of retail sales by December 31, 2024, 52 percent by December 31, 2027, and 60 percent by December 31, 2030, and that CARB should plan for 100 percent eligible renewable energy resources and zero-carbon resources by December 31, 2045.

Senate Bill 1020, Clean Energy, Jobs, and Affordability Act of 2022, approved September 16, 2022, revises SB 100, and instead requires that eligible renewable energy resources and zero-carbon resources supply 90 percent of all retail sales of electricity to end use customers by December 31, 2035, 95 percent of all retail sales to end users by December 31, 2040, and 100 percent of all retail sales to end users by December 31, 2045, and 100 percent of electricity procured to serve all state agencies by December 31, 2035 (California Legislative Information 2022b).

On September 16, 2022, Governor Newsome signed SB 1075, Hydrogen: green hydrogen: emissions of greenhouse gases, which requires CARB, CEC, California Public Utilities Commission (CPUC), and the California Workforce Development Board to conduct an evaluation on hydrogen by June 1, 2024, including policy recommendations to accelerate the production and use of hydrogen, and specifically green hydrogen, and its role in decarbonizing the electrical and transportation sectors (California Legislative Information 2022c).

Cap-and-Trade Program

The Climate Change Scoping Plan identifies a Cap-and-Trade Program as a key strategy CARB will employ to help California meet its GHG reduction targets for 2020 and 2030, and ultimately achieve an 80 percent reduction from 1990 levels by 2050. Pursuant to its authority under AB 32, CARB has designed and adopted a California Cap-and-Trade Program to reduce GHG emissions from major sources (deemed "covered entities") by setting a firm cap on Statewide GHG emissions and employing market mechanisms to achieve AB 32's emission-reduction mandate of returning to 1990 levels of emissions by 2020 (17 CCR 95800–96023). Under Cap-and-Trade program, an overall limit is established for GHG emissions from capped sectors (e.g., electricity generation, petroleum refining, cement production, and large industrial facilities that emit more than 25,000 metric tons CO₂e per year) and declines over time, and facilities subject to the cap can trade permits to emit GHGs. The Statewide cap for GHG emissions from the capped sectors commenced in 2013 and declines over time, achieving GHG emission reductions throughout the Program's duration (see generally 17 CCR 95811, 95812). On July 17, 2017, the California legislature passed Assembly Bill 398, extending the Cap-and-Trade program through 2030.

The Cap-and-Trade Regulation provides a firm cap, ensuring that the 2020 Statewide emission limit will not be exceeded. An inherent feature of the Cap-and-Trade Program is that it does not guarantee GHG emissions reductions in any discrete location or by any particular source. Rather, GHG emissions reductions are only guaranteed on an accumulative basis.

If California's direct regulatory measures reduce GHG emissions more than expected, then the Cap-and-Trade Program will be responsible for relatively fewer emissions reductions. If California's direct regulatory measures reduce GHG emissions less than expected, then the Cap-and-Trade Program will be responsible for relatively more emissions reductions. In sum, the Cap-and-Trade Program will achieve aggregate, rather than site-specific or project-level, GHG emissions reductions. Also, due to the regulatory framework adopted by CARB, the reductions attributed to the Cap-and-Trade Program can change over time depending on the State's emissions forecasts and the effectiveness of direct regulatory measures.

With the passage of AB 1279, the state has a statutory target to achieve carbon neutrality by 2045 and it is clear that additional GHG reductions will be required over this decade to achieve the accelerated 2030 target (CARB 2022a). This will require changes to all major programs to increase their stringency between now and 2030 resulting in reductions in GHG emissions. As these GHG reductions increase, there will be less reliance on the Capand-Trade Program to "fill the gap" to meet the accelerated 2030 reduction target (CARB 2022a). Since the timing of major program changes is uncertain, the Cap-and-Trade Program must continue to be able to scale across a range of possibilities, including potential program design and annual cap changes (CARB 2022a).

California Air Resources Board

The California Air Resources Board (CARB), a part of the California Environmental Protection Agency (CalEPA), is responsible for the coordination and administration of both federal and State air pollution control programs within California. Some of the regulations and measures that CARB has adopted to reduce particulate matter, nitrogen oxides, and other emissions have co-benefits of reducing GHG emissions. Regulations and measures include:

 In 2004, CARB adopted an Airborne Toxic Control Measure (ACTM) to limit heavy-duty diesel motor vehicle idling in order to reduce public exposure to diesel particulate matter and other toxic air contaminants (Title 13 California Code of Regulations [CCR], Section 2485). This measure generally does not allow dieselfueled commercial vehicles to idle for more than five (5) minutes at any given location with certain exemptions for equipment in which idling is a necessary function such as concrete trucks.

- In 2008, CARB approved the Truck and Bus regulation to reduce particulate matter and nitrogen oxide emissions from existing diesel vehicles operating in California (13 CCR, Section 2025[h]). In April 2014, amendments to the Truck and Bus Regulation were approved by CARB to help ensure that the air quality benefits originally envisioned by the regulation will be achieved, by providing some additional compliance flexibility and options to vehicle owners. While these regulations primarily target reductions in criteria air pollutant emission, they have co-benefits of minimizing GHG emissions due to improved engine efficiencies.
- In 2007, CARB promulgated emission standards for off-road diesel construction equipment of greater than 25 horsepower such as bulldozers, loaders, backhoes and forklifts, as well as many other self-propelled off-road diesel vehicles. The regulation aims to reduce emissions by installation of diesel soot filters and encouraging the retirement, replacement, or repower of older, dirtier engines with newer emission controlled models.
- In 2012, CARB approved the Advanced Clean Cars Program (CARB 2021b), which includes low-emission-vehicle regulations that reduce criteria pollutant and GHG emissions from light- and medium-duty vehicles, and the zero-emissions vehicle regulation, which requires manufacturers to produce an increasing number of pure ZEVs (meaning battery electric and fuel cell electric vehicles), with provisions to also produce plug-in hybrid electric vehicles in the 2018–2025 model years. The program aims to reduce smog-forming pollution from passenger vehicles by 75 percent by 2025, with the ultimate goal of total fleet electrification and elimination of tailpipe emissions. CARB is in the process of establishing the next set of low-emission-vehicle and ZEV requirements to contribute to meeting federal ambient air quality ozone standards and California's carbon neutrality targets (CARB 2021b).
- In 2020, CARB approved the Advanced Clean Trucks Program which requires that manufacturers sell zeroemissions or near-zero-emissions trucks as an increasing percentage of their annual California sales
 beginning in 2024. The goal of this proposed strategy is to achieve nitrogen oxide (NOx) and GHG emission
 reductions through advanced clean technology, and to increase the penetration of the first wave of zeroemissions heavy-duty technology into applications that are well suited to its use. According to CARB,
 "Promoting the development and use of advanced clean trucks will help CARB achieve its emission
 reduction strategies as outlined in the State Implementation Plan (SIP), Sustainable Freight Action Plan,
 SB 350, and AB 32" (CARB 2020a). The percentage of zero-emissions truck sales is required to increase
 every year until 2035 when sales would need to be 55 percent of Classes 2b–3 (light/medium- and
 medium-duty trucks) truck sales, 75 percent of Classes 4–8 (medium- to heavy-duty trucks) straight truck
 sales, and 40 percent of truck tractor (heavy-duty trucks weighing 33,001 pounds or greater) sales.
 Additionally, large fleet operators (of 50 or more trucks) would be required to report information about
 shipments and services and their existing fleet operations. By transitioning to zero-emissions trucks, the
 state would move away from petroleum dependency and emit less GHGs from heavy-duty mobile sources.

While these regulations primarily target reductions in criteria air pollutant emission, they have co-benefits of minimizing GHG emissions due to improved engine efficiencies and reduction of idling times.

Regional

South Coast Air Quality Management District

The Project Site is located in the South Coast Air Basin, which consists of Orange County, Los Angeles County (excluding the Antelope Valley portion), and the western, non-desert portions of San Bernardino and Riverside

Counties, in addition to the San Gorgonio Pass area in Riverside County. The SCAQMD is responsible for air quality planning in the South Coast Air Basin and developing rules and regulations to bring the area into attainment of the ambient air quality standards.

The SCAQMD adopted a "Policy on Global Warming and Stratospheric Ozone Depletion" on April 6, 1990. The policy commits the SCAQMD to consider global impacts in rulemaking and in drafting revisions to the Air Quality Management Plan. In March 1992, the SCAQMD Governing Board reaffirmed this policy and adopted amendments to the policy to include the following directives (SCAQMD 1993):

- Phase out the use and corresponding emissions of chlorofluorocarbons, methyl chloroform (1,1,1-trichloroethane or TCA), carbon tetrachloride, and halons by December 1995;
- Phase out the large quantity use and corresponding emissions of hydrochlorofluorocarbons by the year 2000;
- Develop recycling regulations for hydrochlorofluorocarbons (e.g., SCAQMD Rules 1411 and 1415);
- Develop an emissions inventory and control strategy for methyl bromide; and
- Support the adoption of a California GHG emission reduction goal.

In 2008, SCAQMD released draft guidance regarding interim CEQA GHG significance thresholds (SCAQMD 2008a, 2008b, 2008c). Within its October 2008 document, SCAQMD proposed the use of a percent emission reduction target to determine significant for commercial/residential projects that emit greater than 3,000 MTCO2e per year. Under this proposal, commercial/residential projects that emit fewer than 3,000 MTCO2e per year would be assumed to have a less-than-significant impact on climate change. The SCAQMD's proposed 3,000 MTCO2e per year target was developed before 2020 and has never been considered for adoption and, thus, does not apply. On December 5, 2008, the SCAQMD Governing Board adopted the staff proposal for an interim GHG significance threshold of 10,000 MTCO2e for stationary source/industrial projects where the SCAQMD is the Lead Agency. A GHG Significance Threshold Working Group was formed to further evaluate potential GHG significance thresholds (SCAQMD 2008d). The aforementioned Working Group has been inactive since 2011 and the SCAQMD has never formally adopted any GHG significance threshold for land use development projects.

Southern California Association of Governments

On September 3, 2020, the SCAG's Regional Council adopted the 2020–2045 RTP/SCS also known as the Connect SoCal, which is an update to the previous 2012–2035 RTP/SCS and 2016–2040 RTP/SCS (SCAG 2020a). Using growth forecasts and economic trends, both the 2016–2040 RTP/SCS and 2020–2045 RTP/SCS provide a vision for transportation throughout the region for the next several decades by considering the role of transportation in the broader context of economic, environmental, and quality-of-life goals for the future, identifying regional transportation strategies to address mobility needs. Both the 2016–2040 RTP/SCS and 2020–2045 RTP/SCS describe how the region can attain the GHG emission-reduction targets set by CARB by achieving an 8 percent reduction in per capita transportation GHG emissions by 2020 and a 19 percent reduction in per capita transportation emissions by 2035 compared to the 2005 level on a per capita basis (SCAG 2020a). Compliance with and implementation of the 2016–2040 RTP/SCS and 2020–2045 RTP/SCS policies and strategies would

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The performance standards primarily focus on energy efficiency measures beyond Title 24. The SCAQMD adopted a GHG significance threshold of 10,000 MTCO₂e per year for industrial stationary source projects for which the SCAQMD is the lead agency.

have co-benefits of reducing per capita criteria air pollutant emissions (e.g., nitrogen dioxide, carbon monoxide, etc.) associated with reduced per capita vehicle miles traveled (VMT).

The 2020–2045 RTP/SCS states that the SCAG region was home to approximately 18.8 million people in 2016 and included approximately 6.0 million homes and 8.4 million jobs (SCAG 2020b). By 2045, the integrated growth forecast projects that these figures will increase by 3.7 million people, with approximately 1.6 million more homes and 1.7 million more jobs.

SCAG's 2016–2040 RTP/SCS and 2020–2045 RTP/SCS provide specific strategies for implementation. These strategies include supporting projects that encourage a diverse job opportunities for a variety of skills and education, recreation and cultures and a full-range of shopping, entertainment and services all within a relatively short distance; encouraging employment development around current and planned transit stations and neighborhood commercial centers; encouraging the implementation of a "Complete Streets" policy that meets the needs of all users of the streets, roads and highways including bicyclists, children, persons with disabilities, motorists, electric vehicles, movers of commercial goods, pedestrians, users of public transportation, and seniors; and supporting alternative fueled vehicles (SCAG 2020a).

In addition, both the 2016–2040 RTP/SCS and the 2020–2045 RTP/SCS include strategies to promote active transportation, support local planning and projects that serve short trips, promote transportation investments, investments in active transportation, more walkable and bikeable communities, that will result in improved air quality and public health, and reduced greenhouse gas emissions, and supports building physical infrastructure, regional greenways and first-last mile connections to transit, including to light rail and bus stations. The 2016–2040 RTP/SCS and 2020–2045 RTP/SCS align active transportation investments with land use and transportation strategies, increase competitiveness of local agencies for federal and state funding, and to expand the potential for all people to use active transportation. CARB has accepted the SCAG GHG quantification determinations in the 2016–2040 RTP/SCS and the 2020–2045 RTP/SCS and both demonstrate achievement of the GHG emission reduction targets established by CARB (SCAG 2020a, CARB 2020b).

Although there are GHG emission reduction targets for passenger vehicles set by CARB for 2045, the 2020–2045 RTP/SCS GHG emission reduction trajectory shows that more aggressive GHG emission reductions are projected for 2045. By meeting and exceeding the SB 375 targets for 2020 and 2035, as well as achieving an additional 4.1-percent reduction in GHG from transportation-related sources in the ten years between 2035 and 2045, the 2020–2045 RTP/SCS is expected to fulfill and exceed its portion of SB 375 compliance with respect to meeting the State's GHG emission reduction goals (SCAG 2020c).

Local

City of Santa Clarita General Plan

The City of Santa Clarita General Plan (City of Santa Clarita 2011), amended in 2011, serves as a foundation for making land use decisions based on goals and policies related to land use, transportation, population growth and distribution, development, open space, resource preservation and utilization, air and water quality, noise impacts, public safety, infrastructure, and other related physical, social, and economic factors over the next 20 years. It also develops a clear set of development guidelines for citizens, developers, neighboring jurisdictions, and agencies, and provides the community with an opportunity to participate in the planning process. The Project Site is located within the City of Santa Clarita General Plan and is zoned Mixed —se - Neighborhood (MX-N) and is called out in the Land Use Element as a Special Development Area. The Project Site has several physical constraints that will limit

the property from being developed to the maximum allowable standards, including oak trees, Caltrans right-of-way dedication, the future widening of Wiley Canyon Road to four lanes, electrical easements, and drainage. Due to these restraints, any proposed projects on the site shall not exceed 830,000 square feet (representing a floor area ratio of approximately 0.5) of total residential and commercial combined development, excluding parking facilities.

GHGs are covered under the Conservation and Open Space Element of The City of Santa Clarita General Plan and includes the following goals and policies relating to GHG and energy usage which will be implemented in connection with development of the Project, if applicable (City of Santa Clarita 2000).

- Goal CO 8: Development designed to improve energy efficiency, reduce energy and natural resource consumption, and reduce emissions of greenhouse gases.
 - Objective CO 8.1: Comply with the requirements of State law, including AB 32, SB 375 and implementing regulations, to reach targeted reductions of greenhouse gas (GHG) emissions.
 - Policy CO 8.1.1: Create and adopt a Climate Action Plan within 18 months of the One Valley One Vision adoption date of the City's General Plan Update that meets State requirements and includes the following components.
 - A. Plans and programs to reduce GHG emissions to State-mandated targets, including enforceable reduction measures:
 - a. The CAP may establish goals beyond 2020, which are consistent with the applicable laws and regulations referenced in this paragraph and based on current science;
 - b. The CAP shall include specific and general tools and strategies to reduce the City's current and projected 2020 inventory and to meet the CAPs target for GHG reductions by 2020;
 - c. The CAP shall consider, among other GHG reduction strategies, the feasibility of development fees; incentive and rebate programs; and, voluntary and mandatory reduction strategies in areas of energy efficiency, renewable energy, water conservation and efficiency, solid waste, land use and transportation.
 - B. Mechanisms to ensure regular review of progress towards the emission reduction targets established by the Climate Action Plan;
 - C. Procedures for reporting on progress to officials and the public;
 - D. Procedures for revising the plan as needed to meet GHG emissions reduction targets; and,
 - E. Allocation of funding and staffing for Plan implementation;

After adoption of the Climate Action Plan, amend this General Plan if necessary to ensure consistency with the adopted Climate Action Plan.

Policy CO 8.1.2: Participate in the preparation of a regional Sustainable Communities Strategy (SCS) Plan to meet regional targets for greenhouse gas emission reductions, as required by SB 375.

- Policy CO 8.1.3: Revise codes and ordinances as needed to address energy conservation, including but not limited to the following:
 - A. Strengthen building codes for new construction and renovation to achieve a higher level of energy efficiency, with a goal of exceeding energy efficiency beyond that required by Title 24;
 - B. Adopt a Green Building Program to encourage green building practices and materials, along with appropriate ordinances and incentives;
 - C. Require orientation of buildings to maximize passive solar heating during cool seasons, avoid solar heat gain during hot periods, enhance natural ventilation, promote effective use of daylight, and optimize opportunities for on-site solar generation;
 - D. Encourage mitigation of the "heat island" effect through use of cool roofs, light-colored paving, and shading to reduce energy consumption for air conditioning.
- Policy CO 8.1.4: Provide information and education to the public about energy conservation and local strategies to address climate change.
- Policy CO 8.1.5: Coordinate various activities within the community and appropriate agencies related to GHG emissions reduction activities.
 - Objective CO 8.2: Reduce energy and materials consumption and greenhouse gas emissions in public uses and facilities.
- Policy CO 8.2.1: Ensure that all new City buildings, and all major renovations and additions, meet adopted green building standards, with a goal of achieving the LEED (Leadership in Energy and Environmental Design) Silver rating or above, or equivalent where appropriate.
- Policy CO 8.2.2: Ensure energy efficiency of existing public buildings through energy audits and repairs, and retrofit buildings with energy efficient heating and air conditioning systems and lighting fixtures, with a goal of completing energy repairs in City facilities by 2012.
- Policy CO 8.2.3: Support purchase of renewable energy for public buildings, which may include installing solar photovoltaic systems to generate electricity for city buildings and operations and other methods as deemed appropriate and feasible, in concert with significant energy conservation efforts.
- Policy CO 8.2.4: Establish maximum lighting levels for public facilities, and encourage reduction of lighting levels to the level needed for security purposes after business hours, in addition to use of downward-directed lighting and use of low-reflective paving surfaces.
- Policy CO 8.2.5: Support installation of photovoltaic and other renewable energy equipment on public facilities, in concert with significant energy conservation efforts.
- Policy CO 8.2.6: Promote use of solar lighting in parks and along paseos and trails, where practical.
- Policy CO 8.2.7: Support the use of sustainable alternative fuel vehicles for machinery and fleets, where practical, by evaluating fuel sources, manufacturing processes, maintenance costs and vehicle lifetime use.

- Policy CO 8.2.8: Promote the purchase of energy-efficient and recycled products, and vendors and contractors who use energy-efficient vehicles and products, consistent with adopted purchasing policies.
- Policy CO 8.2.9: Reduce heat islands through installation of trees to shade parking lots and hardscapes, and use of light-colored reflective paving and roofing surfaces.
- Policy CO 8.2.10: Support installation of energy-efficient traffic control devices, street lights, and parking lot lights.
- Policy CO 8.2.11: Implement recycling in all public buildings, parks, and public facilities, including for special events.
- Policy CO 8.2.12: Provide ongoing training to appropriate City employees on sustainable planning, building, and engineering practices.
- Policy CO 8.2.13: Support trip reduction strategies for employees as described in the Circulation Element.
- Policy CO 5.2.14: Reduce extensive heat gain from paved surfaces through development standards wherever feasible.
 - Objective CO 8.3: Encourage the following green building and sustainable development practices on private development projects, to the extent reasonable and feasible.
- Policy CO 8.3.1: Evaluate site plans proposed for new development based on energy efficiency pursuant to LEED (Leadership in Energy and Environmental Design) standards for New Construction and Neighborhood Development, including the following: a) location efficiency; b) environmental preservation; c) compact, complete, and connected neighborhoods; and d) resource efficiency, including use of recycled materials and water.
- Policy CO 8.3.2: Promote construction of energy efficient buildings through requirements for LEED certification or through comparable alternative requirements as adopted by local ordinance.
- Policy CO 8.3.3: Promote energy efficiency and water conservation upgrades to existing non-residential buildings at the time of major remodel or additions.
- Policy CO 8.3.4: Encourage new residential development to include on-site solar photovoltaic systems, or pre-wiring, in at least 50% of the residential units, in concert with other significant energy conservation efforts.
- Policy CO 8.3.5: Encourage on-site solar generation of electricity in new retail and office commercial buildings and associated parking lots, carports, and garages, in concert with other significant energy conservation efforts.
- Policy CO 8.3.6: Require new development to use passive solar heating and cooling techniques in building design and construction, which may include but are not be limited to building orientation, clerestory windows, skylights, placement and type of windows, overhangs to shade doors and windows, and use of light colored roofs, shade trees, and paving materials.

- Policy CO 8.3.7: Encourage the use of trees and landscaping to reduce heating and cooling energy loads, through shading of buildings and parking lots.
- Policy CO 8.3.8: Encourage energy-conserving heating and cooling systems and appliances, and energy-efficiency in windows and insulation, in all new construction.
- Policy CO 8.3.9: Limit excessive lighting levels, and encourage a reduction of lighting when businesses are closed to a level required for security.
- Policy CO 8.3.10: Provide incentives and technical assistance for installation of energy-efficient improvements in existing and new buildings.
- Policy CO 8.3.11: Consider allowing carbon off-sets for large development projects, if appropriate, which may include funding off-site projects or purchase of credits for other forms of mitigation, provided that any such mitigation shall be measurable and enforceable.
- Policy CO 8.3.12: Reduce extensive heat gain from paved surfaces through development standards wherever feasible.
 - Objective CO 8.4: Reduce energy consumption for processing raw materials by promoting recycling and materials recovery by all residents and businesses throughout the community.
- Policy CO 8.4.1: Encourage and promote the location of enclosed materials recovery facilities (MRF) within the Santa Clarita Valley.
- Policy CO 8.4.2: Adopt mandatory residential recycling programs for all residential units, including single-family and multi-family dwellings.
- Policy CO 8.4.3: Allow and encourage composting of greenwaste, where appropriate.
- Policy CO 8.4.4: Promote commercial and industrial recycling, including recycling of construction and demolition debris.
- Policy CO 8.4.5: Develop and implement standards for refuse and recycling receptacles and enclosures to accommodate recycling in all development.
- Policy CO 8.4.6: Introduce and assist with the placement of receptacles for recyclable products in public places, including at special events.
- Policy CO 8.4.7: Provide information to the public on recycling opportunities and facilities, and support various locations and events to promote public participation in recycling.
- Policy CO 8.4.8: Take an active role in promoting, incubating, and encouraging businesses that would qualify under the Recycling Market Development Zone program or equivalent, including those that manufacture products made from recycled products, salvage, and resource recovery business parks.

City of Santa Clarita Climate Action Plan

In 2012, the City of Santa Clarita adopted the Climate Action Plan (CAP), in compliance with Policy CO 8.1.1 of the City's General Plan, which outlines the City's strategy to reduce GHG emissions in the City by 4 percent below 2005 baseline levels and 17 percent below 2020 business-as-usual (BAU) emission levels, which is consistent with the overall Statewide goals of AB 32 (City of Santa Clarita 2012). The CAP sets forth goals, policies, and ordinances in transportation, land use, energy, conservation, water conservation, and vegetation to achieve the City's GHG reduction target to comply with AB 32. The CAP meets the criteria in CEQA Guidelines 15183.5(b) for a "plan to reduce GHG emissions." However, since the CAP is only certified through 2020 and the Project is expected to be built out in 2024 the CAP was not used in the GHG plan consistency analysis since it is no longer applicable.

The CAP states that projects requiring a zone change/General Plan amendment and large-scale development projects will be required to demonstrate consistency with the CAP. Compliance with the CAP can be demonstrated by showing that the project can reduce its associated GHG emissions by 12 percent below the BAU scenario. Since this significance threshold is consistent with the overall reduction expected in the CAP the goals, objectives, and policies approved under the General Plan are forecast to meet AB 32 GHG emission reduction targets. Therefore, development projects that can demonstrate consistency with the General Plan and zoning ordinance will by association demonstrate consistency with the CAP.

City of Santa Clarita Green Building Standards Code

The City of Santa Clarita Green Building Standards Code is provided in Title 25, Chapters 25.01 through 25.04 of the Santa Clarita Municipal Code (SCMC). The section of the SCMC adopts the 2022 California Green Building Standards Code. SCMC section 25.04.010 provides an expedited, streamlined electric vehicle charging station (EVCS) permitting and inspection process that complies with AB 1236. SCMC Chapter 17.35 helps to create a mixture of commercial and residential uses that emphasize a sense of place, pedestrianism, and public transportation. The Non-Motorized Plan (SCMC Chapter 17.35 and section 17.80.050) focuses on connections to transit, safe routes to schools that aren't auto dependent, and the relationship between trails and development. It impacts the design and connectivity of these systems throughout the City. The City's Construction and Demolition regulations (SCMC Chapter 15.46) requires all demolition projects, commercial projects over \$200,000, all new commercial projects over 1,000 square feet, all new residential construction projects, and all residential additions and improvements that increase building area, volume, or size to recycle a minimum of 65% of all inert materials and 65% of all other materials.

4.7.3 Thresholds of Significance

The project's potential impacts on GHGs will be assessed using the GHG thresholds set forth in Appendix G, Environmental Checklist Form, of the CEQA Guidelines. According to Appendix G of the CEQA Guidelines, the project would have a significant impact related to GHGs if the project would:

- 1. Generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment.
- 2. Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs.

Amendments to CEQA Guidelines section 15064.4 were adopted to assist lead agencies in determining the significance of the impacts of GHG emissions. CEQA Guidelines section 15064.4 gives lead agencies the discretion to determine whether to assess those emissions quantitatively or qualitatively. If a qualitative analysis is used, in addition to quantification, this section recommends certain qualitative factors that may be used in the

determination of significance (i.e., extent to which the project may increase or reduce GHG emissions compared to the existing environment; whether the project exceeds an applicable significance threshold; and extent to which the project complies with regulations or requirements adopted to implement a reduction or mitigation of GHGs). The amendments to CEQA Guidelines Section 15064.4 do not establish a threshold of significance; rather, lead agencies are granted discretion to establish significance thresholds for their respective jurisdictions, including looking to thresholds developed by other public agencies, or suggested by other experts, such as the California Air Pollution Control Officers Association (CAPCOA), so long as any threshold chosen is supported by substantial evidence (see CEQA Guidelines Section 15064.7(c)).

The California Natural Resources Agency has also clarified that the Guidelines Amendments focus on the effects of GHG emissions as cumulative impacts, and that they should be analyzed in the context of CEQA's requirements for cumulative impact analysis (see CEQA Guidelines Section 15064(h)(3)).

Although GHG emissions can be quantified as discussed under Section 4.7.4 below, CARB, SCAQMD, and the City have not adopted quantitative project-level significance thresholds for GHG emissions that would be applicable to the project. The Governor's Office of Planning and Research (OPR) released a technical advisory on CEQA and climate change that provided some guidance on assessing the significance of GHG emissions, and states that "lead agencies may undertake a project-by-project analysis, consistent with available guidance and current CEQA practice," and that while "climate change is ultimately a cumulative impact, not every individual project that emits GHGs must necessarily be found to contribute to a significant cumulative impact on the environment" (OPR 2008). Furthermore, the technical advisory states that "CEQA authorizes reliance on previously approved plans and mitigation programs that have adequately analyzed and mitigated GHG emissions to a less than significant level as a means to avoid or substantially reduce the cumulative impact of a project" (OPR 2008).

The CEQA Guidelines were amended in response to SB 97. In particular, the CEQA Guidelines were amended to specify that compliance with a GHG emissions reduction plan renders a cumulative impact insignificant.

Per CEQA Guidelines Section 15064(h)(3), a project's incremental contribution to a cumulative impact can be found not cumulatively considerable if the project would comply with an approved plan or mitigation program that provides specific requirements that will avoid or substantially lessen the cumulative problem within the geographic area of the project (14 CCR 15064[h][3]). To qualify, such a plan or program must be specified in law or adopted by the public agency with jurisdiction over the affected resources through a public review process to implement, interpret, or make specific the law enforced or administered by the public agency (14 CCR 15064[h][3]). Examples of such programs include a "water quality control plan, air quality attainment or maintenance plan, integrated waste management plan, habitat conservation plan, natural community conservation plan, [and] plans or regulations for the reduction of greenhouse gas emissions" (14 CCR 15064[h][3]).

Thus, CEQA Guidelines Section 15064(h)(3) allows a lead agency to make a finding of non-significance for GHG emissions if a project complies with a program and/or other regulatory schemes to reduce GHG emissions.⁷

CARB's Climate Change Scoping Plan, SCAG's 2020–2045 RTP/SCS (Connect SoCal), and the City of Santa Clarita General Plan and CAP all apply to the project and are all intended to reduce GHG emissions to meet the Statewide targets set forth in AB 32 and as expanded by SB 32 and AB 1279. Thus, in the absence of any adopted quantitative threshold, the significance of the project's GHG emissions is evaluated consistent with CEQA Guidelines Section 15064.4(b)(2) by considering whether the project complies with applicable plans, policies, regulations and requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of greenhouse gas emissions, including CARB's 2022 Climate Change Scoping Plan, Connect SoCal, City of Santa Clarita General Plan, City of Santa Clarita CAP, and the City of Santa Clarita Code Green Building Standards Code.

4.7.4 Methodology

The analysis herein includes the determination of consistency with applicable GHG reduction strategies and local actions approved or adopted by CARB, SCAG, and the City. Although there is no applicable quantitative GHG significance threshold, this analysis also includes the quantification of GHG emissions for informational purposes only.

Quantification of Emissions

In addition to the evaluation of the project's consistency with plans adopted for the purpose of reducing and/or mitigating GHG emissions, this analysis also calculates for informational purposes the amount of GHG emissions that would be attributable to the project using recommended air quality models, as described below. The primary purpose of quantifying the project's GHG emissions is to satisfy CEQA Guidelines Section 15064.4(a), which calls for a good-faith effort to describe and calculate emissions. The significance of the project's GHG emissions impacts is not based on the amount of GHG emissions resulting from the project.

The California Climate Action Registry (Climate Registry) has prepared the General Reporting Protocol for calculating and reporting GHG emissions from a number of general and industry-specific activities (The Climate Registry 2016). The GHG emissions provided in this report are consistent with the General Reporting Protocol framework. The General Reporting Protocol recommends separating GHG emissions into three categories that reflect different aspects of ownership or control over emissions. They include the following:

- Scope 1: Direct, on-site combustion of fossil fuels (e.g., natural gas, propane, gasoline, and diesel).
- Scope 2: Indirect, off-site emissions associated with purchased electricity or purchased steam.

See, for example, San Joaquin Valley Air Pollution Control District (SJVAPCD), CEQA Determinations of Significance for Projects Subject to ARB's GHG Cap-and-Trade Regulation, APR-2025 (June 25, 2014), in which the SJVAPCD "determined that GHG emissions increases that are covered under ABR's Cap-and-Trade regulation cannot constitute significant increases under CEQA." Furthermore, the SCAQMD has taken this position in CEQA documents it has produced as a lead agency. The SCAQMD has prepared three Negative Declarations and one Draft Environmental Impact Report that demonstrate the SCAQMD has applied its 10,000 MTCO₂e/yr significance threshold in such a way that GHG emissions covered by the Cap-and-Trade Program do not constitute emissions that must be measured against the threshold. See SCAQMD, Final Negative Declaration for Ultramar Inc. Wilmington Refinery Cogeneration Project, SHC No. 2012041014 (October 2014); SCAQMD Final Negative Declaration for Phillips 99 Los Angeles Refinery Carson Plant—Crude Oil Storage Capacity Project, SCH No. 2013091029 (December 2014); SCAQMD Final Mitigated Negative Declaration for Toxic Air Contaminant Reduction for Compliance with SCAQMD Rules 1420.1 and 1402 at the Exide Technologies Facility in Vernon, CA, SCH No. 2014101040 (December 2014); and SCAQMD Final Environmental Impact Report for the Breitburn Santa Fe Springs Blocks 400/700 Upgrade Project, SCH No. 2014121014 (August 2015).

 Scope 3: Indirect emissions associated with other emissions sources, such as third-party vehicles and embodied energy.⁸

CARB recommends consideration of indirect emissions to provide a more complete picture of the GHG footprint of a facility: "As facilities consider changes that would affect their emissions – addition of a cogeneration unit to boost overall efficiency even as it increases direct emissions, for example – the relative impact on total (direct plus indirect) emissions by the facility should be monitored. Annually reported indirect energy usage also aids the conservation awareness of the facility and provides information" to CARB to be considered for future strategies by the industrial sector (CARB 2010). For these reasons, CARB has proposed requiring the calculation of direct and indirect GHG emissions as part of the AB 32 reporting requirements. Additionally, the Office of Planning and Research directs lead agencies to "make a good-faith effort, based on available information, to calculate, model, or estimate...GHG emissions from a project, including the emissions associated with vehicular traffic, energy consumption, water usage and construction activities" (OPR 2008). Therefore, direct and indirect emissions have been calculated for the project.

A fundamental challenge in the analysis of GHG emissions is the global nature of the existing and cumulative future conditions. Changes in GHG emissions can be difficult to attribute to a particular project because the project may cause a shift in the locale for some type of GHG emissions, rather than simply causing "new" GHG emissions. As a result, there is a lack of clarity as to whether a project's GHG emissions represent a net global increase, reduction, or no change in GHGs that would exist if the project were not implemented.

It is considered reasonable and consistent with criteria pollutant calculations to consider those GHG emissions resulting from project-related incremental (net) increases from emissions sources mentioned in the scope categories above such as emissions from the use of on-road mobile vehicles, electricity, and natural gas compared to existing conditions. This includes project construction activities such as building construction, hauling, and construction worker trips. This analysis also considers indirect GHG emissions from water conveyance, wastewater generation, and solid waste handling. Since potential impacts resulting from GHG emissions are long-term rather than acute, GHG emissions are calculated on an annual basis.

GHG emissions are estimated using the California Emissions Estimator Model (CalEEMod, version 2020.4.0), which is a Statewide land use emissions computer model designed to provide a uniform platform for government agencies, land use planners, and environmental professionals to quantify potential criteria pollutant and GHG emissions from a variety of land use projects. CalEEMod was developed in collaboration with the air districts of California. Regional data (e.g., emission factors, trip lengths, meteorology, source inventory) have been provided by the various California air districts to account for local requirements and conditions. The model is considered to be an accurate and comprehensive tool for quantifying air quality and GHG impacts from land use projects throughout California. In addition to CalEEMod, CARB's on road vehicle emissions factor model (EMFAC) 2021 emission factors were used to determine on-road vehicle emissions from construction activities.

Construction

GHG emissions during construction are forecasted by assuming a conservative estimate of construction activities (i.e., assuming all construction occurs at the earliest feasible date). Construction anticipated by the proposed project may result in GHG emissions of CO₂ and smaller amounts of CH₄ and N₂O from construction equipment and

⁸ Embodied energy includes energy required for water pumping and treatment for end-uses. Third-party vehicles include vehicles used by visitors of the Project Site.

⁹ See http://www.aqmd.gov/caleemod/.

mobile sources, such as haul trucks and worker vehicles. Construction emissions were calculated using CalEEMod and applying emission factors from CARB's emissions factor (EMFAC) model 2021 emission factors to calculate mobile source emissions. CalEEMod is based on outputs from the CARB off-road emissions factor (OFFROAD) and EMFAC models, which are emissions estimation models developed by CARB and used to calculate emissions from construction activities, including on- and off-road vehicles.

The input values used in this analysis were adjusted to be project-specific based on equipment types and the construction schedule. Worker, vendor, and concrete truck trips were based on information obtained from the Applicant. The project is not expected to export soil; however, approximately 85,000 cubic yards of soil would be imported on-site. Emissions from on-road vehicles were estimated outside of CalEEMod using EMFAC2021 emission factors. These values were applied to the construction phasing assumptions used in the criteria pollutant analysis to generate criteria pollutant emissions values for each construction activity. Emissions from project construction activities were estimated based on the construction phase in which the activity would be occurring. The project's construction phasing and equipment list is available in Appendix G.

Project construction is estimated to start in 2025 and end in late 2027 but may commence at a later date. If this occurs, construction impacts would be lower than those analyzed due to the use of a more energy-efficient and cleaner burning construction vehicle fleet mix, pursuant to State regulations that require vehicle fleet operators to phase-in less polluting heavy-duty equipment. As a result, should project construction commence at a later date than analyzed in this analysis, GHG impacts would be lower than the impacts disclosed herein.

The SCAQMD guidance, Draft Guidance Document – Interim CEQA Greenhouse Gas (GHG) Significance Threshold, recognizes that construction-related GHG emissions from projects "occur over a relatively short-term period of time" and that "they contribute a relatively small portion of the overall lifetime project GHG emissions" (SCAQMD 2008a). In accordance with SCAQMD guidance, GHG emissions from construction have been amortized (i.e., averaged annually) over the lifetime of the project. The SCAQMD defines the lifetime of a project as 30 years (SCAQMD 2008a). Therefore, the project's total construction GHG emissions were divided by 30 to determine an annual construction emission estimate comparable to operational emissions.

Operation

Similar to construction, operational GHG emissions are also estimated using CalEEMod, along with CARB's on-road vehicle EMFAC model, updated for EMFAC2021 values. CalEEMod was used to estimate GHG emissions from electricity, natural gas, solid waste, water and wastewater, mobile sources, and landscaping equipment.

As previously noted, operational mobile source GHG emissions are estimated based on CARB's on-road vehicle EMFAC model. The trip lengths are based on the location and setting of the project area. The average trip length of each land use is the sum of the trip length of each trip type multiplied by the percentage of trip type. For mobile sources, the estimated vehicle trips were provided for the project uses in a project specific traffic study (Stantec 2022), in accordance with the City of Santa Clarita's VMT analysis guidelines.

In addition, the operational mobile source GHG emissions estimates are based on GHG emission factors for the mobile sources utilizing EMFAC2021 and the GWP values for the GHGs emitted. Emissions of GHGs from motor vehicles are dependent on specific vehicle types and models that would travel to and from the project site. All vehicle types would visit the project site. Therefore, this assessment uses the Santa Clarita Valley Consolidated Traffic Model to estimate average home based trip lengths, vehicle trips, and population.

With regard to energy demand, the consumption of fossil fuels to generate electricity and to provide heating and hot water generates GHG emissions. Emissions of GHGs associated with energy usage under the project's proposed land uses are calculated using the CalEEMod tool. Future fuel consumption rates are estimated based on specific square footage of the residential land uses, as well as predicted water supply needs of the project. CalEEMod then bases GHG emissions related to the project's estimated energy demand using the GHG emission factors for the electricity and natural gas utilities providers' CO₂e intensity factors for supplied electricity and natural gas.

Emissions of GHGs associated with solid waste disposal under the project's proposed land uses are calculated within CalEEMod using the default solid waste values. The emissions are based on the size of the land uses, the waste disposal rate for the land uses, the waste diversion rate, the GHG emission factors for solid waste decomposition, and the GWP values for the GHGs emitted (CAPCOA 2021).

The emissions of GHGs associated with water demand and wastewater generation from the project are calculated within CalEEMod using the default water demand and wastewater generation values. The emissions are based on the size of the land uses, the water demand factors, the electrical intensity factors for water supply, treatment, and distribution and for wastewater treatment, the GHG emission factors for the electricity utility provider, and the GWP values for the GHGs emitted (CAPCOA 2021).

The emissions of GHGs associated with operational area sources under the project are calculated within CalEEMod using landscaping equipment default values. The emissions for landscaping equipment are based on the size of the open space required based on the land uses, the GHG emission factors for fuel combustion, and the GWP values for the GHGs emitted.

Emissions calculations also include credits or reductions for GHG reducing measures, some of which are required by regulation, such as compliance with SCAQMD rules and regulations, including water exposed areas and reduce vehicle speed on unpaved roads and reductions in energy and water demand since the Project would comply with the 2022 Title 24 Building Standards. These reductions have been included as mitigation measures in CalEEMod.

Project Consistency with Applicable Plans and Policies

The project's GHG emission impacts are evaluated by assessing the project's consistency with applicable GHG reduction strategies and local actions approved or adopted by CARB, SCAG, and the City. As there is no applicable adopted or accepted numerical threshold of significance for GHG emissions, the methodology for evaluating the project's impacts related to GHG emissions focuses on its consistency with statewide, regional, and local plans adopted for the purpose of reducing and/or mitigating GHG emissions. This evaluation of consistency with such plans is the sole basis for determining the significance of the Project's GHG-related impacts on the environment.

 A consistency analysis is provided and describes the project's compliance with relevant regulations and the goals and strategies outlined in the applicable portions of the 2022 Climate Change Scoping Plan, SCAG 2020–2045 RTP/SCS, City of Santa Clarita General Plan and the City of Santa Clarita CAP.

DRAFT EIR FOR WILEY CANYON PROJECT MARCH 2024

The electricity CO₂e emission factors used for energy calculations in CalEEMod are from SCE. For the buildout year, 2025, the electricity emissions factor was 306.1788 lbs CO2e/MWh. https://www.edison.com/content/dam/eix/documents/sustainability/eix-esg-pilot-quantitative-section-sce.pdf and https://www.sce.com/sites/default/files/inline-files/SCE_2019PowerContentLabel.pdf

4.7.5 Impact Analysis

Threshold GHG-1: Would the project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

Construction

The emissions of GHGs associated with construction of the project were calculated for each phase of construction activity using CalEEMod and EMFAC2021. CalEEMod runs are located in Appendix B. Results of the mitigated GHG emissions calculations are presented on Table 4.7-4, Estimated Project Construction Greenhouse Gas Emissions. As presented therein, construction of the project is anticipated to generate approximately 7,266 MTCO₂e during the construction period.

Although GHGs are generated during construction and are accordingly considered one-time emissions, it is important to include them when assessing all of the long-term GHG emissions associated with a project. As recommended by the SCAQMD, construction-related GHG emissions were amortized over a 30-year project lifetime in order to include these emissions as part of a project's annualized lifetime total emissions. In accordance with this methodology, the estimated project's construction GHG emissions have been amortized over a 30-year period and are added to the annualized operational GHG emissions. The amortized annual project construction emissions would be 242 MTCO₂e per year over 30 years. Due to the potential persistence of GHGs in the environment, impacts are based on annual emissions and, in accordance with SCAQMD methodology, construction-period impacts are not assessed independent of operational-period impacts, which are discussed in the next section (SCAQMD 2019).

Table 4.7-4. Estimated Project Construction Greenhouse Gas Emissions^{a,c}

Construction Phase	GHG Emissions (MTCO ₂ e)
Demolition	46
Site Preparation	35
Grading/Excavation ^b	1,780
Drainage/Utilities/Sub-Grade	592
Foundations/Concrete Pour	193
Building Construction	2,331
Paving	2,207
Architectural Coating	83
Tota	7,266
Amortized	242

Source: Appendix B.

- ^a Totals may not add up exactly due to rounding in the modeling calculations. Detailed emissions calculations are provided in Exhibit B of this technical report.
- b GHG emissions were calculated to account for the additional haul trucks associated with the additional 23,000 cy of imported soil.
- CO2e emissions are calculated using the global warming potential values from the Intergovernmental Panel on Climate Change Fourth Assessment Report: 25 for CH4 and 298 for N20 (Intergovernmental Panel on Climate Change, Fourth Assessment Report: The Physical Science Basis, Summary for Policy Makers, (2007)).

Operations

The emissions of GHGs associated with the operation of the project were calculated using CalEEMod and EMFAC2021 as detailed in Section 4.7.4. CalEEMod runs are located in Appendix B. Results of the GHG emissions

calculations are presented on Table 4.7-5, Estimated Operational Greenhouse Gas Emissions for Buildout Year. As presented therein, annual operation of the project is anticipated to generate approximately 5,195 MTCO₂e, including the amortized construction emissions. Estimated vehicle trips for the project were provided in the traffic study (Stantec 2022).

Table 4.7-5. Estimated Operational Greenhouse Gas Emissions for Buildout Year a

Source		MTCO ₂ e/year
Area		10
Energy		1,157
Mobile		3,394
Waste		156
Water		236
	Total Operational:	4,953
	Amortized Construction:	242
	Total Project Emissions:	5,195

Source: Appendix B

Natural gas usage factors are based on residential data from the California Energy Commission, and landscape equipment emissions are based on off-road emission factors from CARB. Emissions from the use of consumer products and the reapplication of architectural coatings are based on data provided in CalEEMod.

Post Buildout Emissions

The CARB 2022 Scoping Plan For Achieving Carbon Neutrality, was approved in December 2022 and expands on prior Scoping Plans and recent legislations, such as AB 1279, by outlining a technologically feasible, cost-effective, and equity-focused path to achieve the state's climate target of reducing anthropogenic GHG emissions to 85 percent below 1990 levels and achieving carbon neutrality by 2045 or earlier (CARB 2022a). To achieve carbon neutrality by 2045, the 2022 Scoping Plan contains GHG reductions, technology, and clean energy mandated by statutes, reduction of short-lived climate pollutants, and mechanical carbon dioxide capture and sequestration actions (CARB 2022a). The 2022 Scoping Plan includes the Scoping Plan Scenario, which "builds on and integrates efforts already underway to reduce the state's GHG, criteria pollutant, and toxic air contaminant emissions by identifying the clean technologies and fuels that should be phased in as the state transitions away from combustion of fossil fuels" (CARB 2022a). The 2022 Scoping Plan approaches decarbonization from two perspectives: (1) managing a phasedown of existing energy sources and technology and (2) ramping up, developing, and deploying alternative clean energy sources and technology over time (CARB 2022a). Key actions to support success of the 2022 Scoping Plan include, without limitation:

Transportation Sector: Decarbonizing the transportation sector through ZEVs; ensuring an adequate supply of zero-carbon alterative fuel; and achieving a per capita VMT of at least 25 percent below 2019 levels by 2030 and 30 percent below 2029 by 2045 by reimaging roadway project to decrease VMT, investing in public transit, streamlining access to public transportation, and ensuring alignment of land use (CARB 2022a).

Clean Electricity Grid: Support grid reliability and expansion of renewable and zero-carbon resources and infrastructure deployment; facilitating resource development such as long-duration energy storage and hydrogen

^a Totals may not add up exactly due to rounding in the modeling calculations. Detailed emissions calculations are provided in Exhibit B of this technical report.

b GHG emissions were calculated to account for the additional haul trucks associated with the additional 23,000 cy of imported soil.

production; enhancing decarbonization; doubling statewide energy efficiency saving in electricity and fossil gas end uses by 2030; building all electric and electric ready homes; strengthening building standards to support zero-emission new construction and developing building performance standards for existing buildings; zero-emission standards for new space and water heaters; and utilizing low-GWP refrigerants (CARB 2022a).

Sustainable Manufacturing and Buildings: Prioritizing alternative fuel transitions; reduce materials and process emissions and energy emissions from industrial facilities; develop CCS and hydrogen production infrastructure; establishing markets for low-carbon products and recycled materials; incentivizing the installation of energy efficiency and renewable energy technologies; and evaluating hydrogen to meet GHG reduction goals (CARB 2022a).

CDR and DAC: Incorporating CCS into other sectors besides transportation; addressing market barriers to CCS and CDR, evaluating using CCS in cement decarbonization; supporting carbon management infrastructure projects; exploring carbon capture applications, building carbon capture infrastructure and hydrogen roadmaps; and streamlining permitting barriers (CARB 2022a).

Short-Lived Climate Pollutants: Installing anaerobic digesters; maximizing biomethane capture; maximizing and expanding existing infrastructure to reduce landfill disposal; expanding markets for products made from organic waste; recovering edible food; identifying and mitigating methane leaks; installing vapor collection systems on high emitting equipment; phasing out venting and flaring of gasses; expanding the use of very low- or no-GWP technologies in all HFC end-use sectors: and reducing fuel combustion from transportation emissions and reclaimed refrigerants (CARB 2022a).

Natural and Working Lands: increasing climate smart forest, shrubland, and grassland management; increasing climate smart agricultural practices; annually conserving croplands; increasing organic agriculture; increasing healthy soils practices; increasing annual investments in urban tress; restoring wetlands; and cutting land conversion of deserts and sparsely vegetated landscapes (CARB 2022a).

The GHG Emissions Technical Analysis (Appendix G) was prepared to determine the potential GHG impacts associated with the project. Due to the technological shifts required and the unknown parameters of the regulatory framework in 2045, quantitatively analyzing the project's impacts relative to the 2045 goal is speculative for purposes of CEQA. Due to the uncertainty regarding specific State and local actions that will be implemented to achieve the 2045 GHG emission reduction targets, calculating project emissions levels for 2045 would be highly speculative. Nonetheless, Statewide efforts are underway to facilitate the State's achievement of those goals and it is reasonable to expect the project's emissions level to decline as the regulatory initiatives identified by CARB in the 2022 Scoping Plan are implemented, and other technological innovations occur. Stated differently, the project's emissions total at buildout represents the maximum emissions inventory for the project as California's emissions sources are being regulated (and foreseeably expected to continue to be regulated in the future) in furtherance of the State's environmental policy objectives. Project emissions, once fully constructed and operational, would be anticipated to decline in future years, but mobile emissions would still result in the majority of the project's GHG emissions.

Consistency with Plans, Policies and Regulations

As described above, compliance with a GHG emissions reduction plan renders a less-than-significant impact. The analyses below demonstrate that the project is consistent with the applicable GHG emission reduction plans and

policies included within the 2022 Climate Change Scoping Plan, SCAG 2020–2045 RTP/SCS, City of Santa Clarita General Plan, and City of Santa Clarita CAP.

CARB's Climate Change Scoping Plan

At the State level, B-30-15 is an order from the State's Executive Branch for the purpose of reducing GHG emissions. Executive Order B-30-15's goal to reduce GHG emissions to 40 percent below 1990 levels by 2030 was adopted by the Legislature in SB 32 and also codified into law in AB 32.

In support of AB 32, the State has promulgated specific laws and strategies aimed at GHG reductions that are applicable to the project. The primary focus of many of the Statewide and regional plans, policies, and regulations is to address worldwide climate change. Due to the complex physical, chemical, and atmospheric mechanisms involved in global climate change, there is no basis for concluding that the project's increase in annual GHG emissions would cause a measurable change in global GHG emissions necessary to influence global climate change. Newer construction materials and practices, energy efficiency requirements, and newer appliances tend to emit lower levels of air pollution emissions, including GHGs, as compared to those built years ago; however, the net effect is difficult to quantify. The GHGs emission of the project alone would not likely cause a direct physical change in the environment. According to CAPCOA, "GHG impacts are exclusively cumulative impacts; there are no non-cumulative GHG emission impacts from a climate change perspective" (CAPCOA 2008). It is global GHG emissions in their aggregate that contribute to climate change, not any single source of GHG emissions alone.

There are several GHG reduction plans and programs that will be implemented at the State and local level which will indirectly reduce GHG emissions from the project. These plans, programs and regulations are beyond control of the project and will occur with or without the implementation of the project. These include:

California Renewables Portfolio Standard (RPS) Program (SB 100): The project complies with SB100 inasmuch as the project is served by Southern California Edison (SCE), which achieved 43 percent of its customer deliveries from carbon-free resources in 2020 (SCE 2020). Furthermore, per the updated requirements of SB 100, signed by Governor Brown on September 10, 2018, SCE would be required to procure eligible renewable electricity for 44 percent of retail sales by December 31, 2024, 52 percent by December 31, 2027, and 60 percent by December 31, 2030 and should plan to achieve 100 percent eligible renewable energy resources and zero-carbon resources by December 31, 2045. The project would incorporate energy efficient measures as part of meeting applicable requirements of the 2022 Title 24 Building Energy Efficiency Standards and CALGreen Code or applicable version at the time of building permit issuance.

Assembly Bill 1109: According to the CEC, energy savings from AB 1109 are achieved through codes and standards. Energy savings from AB 1109 are calculated as part of codes and standards savings (CEC 2013). The project would meet or exceed the applicable requirements of the 2022 Title 24 Building Energy Efficiency Standards and CALGreen Code.

SB 1368, CCR Title 20, Cap and Trade Program: Reduces GHG emissions from major sources (deemed "covered entities") by setting a firm cap on Statewide GHG emissions and employing market mechanisms to achieve AB 32's emission-reduction mandate of returning to 1990 levels of emissions by 2020. Under the Cap-and-Trade Program, an overall limit is established for GHG emissions from capped sectors (e.g., electricity generation) and declines over time, and facilities subject to the cap can trade permits to emit GHGs. The Statewide cap for GHG emissions from the capped sectors commenced in 2013 and declines over time, achieving GHG emission reductions throughout the Program's duration, and on July 17, 2017 the California legislature passed Assembly Bill 398, extending the

Cap-and-Trade Program through 2030. The project would be consistent with this regulation as the project's GHG emissions associated with electricity usage are covered by the Cap-and-Trade Program as the Cap-and-Trade Program covers the GHG emissions associated with electricity consumed in California, whether generated instate or imported.

AB 1493 (Pavley Regulations): Reduces GHG emissions in new passenger vehicles from model year 2012 through 2016 (Phase I) and model years 2017–2025 (Phase II). AB 1493 also reduces gasoline consumption to a rate of 31 percent of 1990 gasoline consumption (and associated GHG emissions) by 2020. The project would be consistent with this regulation and would not conflict with implementation of the vehicle emissions standards. GHG emissions related to vehicular travel by the project would benefit from this regulation because vehicle trips associated with the project would be affected by AB 1493. Mobile source emissions generated by the project would be reduced with implementation of AB 1493 consistent with reduction of GHG emissions under AB 32.

Low Carbon Fuel Standard (LCFS) (Executive Order S-01-07): Establishes protocols for measuring life-cycle carbon intensity of transportation fuels and helps to establish use of alternative fuels. This executive order establishes a Statewide goal to reduce the carbon intensity of California's transportation fuels by at least 10 percent by 2020. The project would be consistent with this regulation and would not conflict with implementation of the transportation fuel standards. GHG emissions related to vehicular travel by the project would benefit from this regulation and mobile source emissions generated by the project would be reduced with implementation of LCFS consistent with reduction of GHG emissions under AB 32.

Advanced Clean Cars Program: In 2012, CARB adopted the Advanced Clean Cars (ACC) Program to reduce criteria pollutants and GHG emissions for model year vehicles 2015 through 2025. ACC includes the Low-Emission Vehicle (LEV) regulations that reduce criteria pollutants and GHG emissions from light- and medium-duty vehicles, and the Zero-Emission Vehicle (ZEV) regulation, which requires manufacturers to produce an increasing number of pure ZEVs (meaning battery electric and fuel cell electric vehicles), with provisions to also produce plug-in hybrid electric vehicles (PHEV) in the 2018 through 2025 model years. The standards would apply to all vehicles used by construction employees, residents, workers, and visitors associated with the project.

Advanced Clean Cars II Program: CARB approved the Advanced Clean Cars II Program (ACCII) for model years 2026 through 2025. In 2022. ACCII required that all new passenger cars, trucks and SUVs sold in California be zero emissions by 2035. The regulation amends the ZEV Regulation to require an increasing number of zero-emission vehicles, and relies on advanced vehicle technologies, including battery-electric, hydrogen fuel cell electric and plugin hybrid electric-vehicles, to meet air quality and climate change emissions standards, in support of EO N-79-20. The project would comply with CALGreen requirements meeting the number of electric-vehicle-ready and electric-vehicle-capable parking spaces to support zero-emissions vehicles and plug-in hybrid electric vehicles. As such, the project would support compliance with these regulations.

Advanced Clean Truck Regulation: CARB approved the Advanced Clean Truck Program in 2021. The project would benefit from implementation of the Advanced Clean Truck Regulation which aims to increase zero-emissions truck sales annually. This regulation achieves NOx and GHG emission reductions through advanced clean technology by accelerating the transition of zero-emission medium-and heavy-duty vehicles from Class 2b to Class 8. By 2035, zero-emissions truck/chassis sales would need to be 55 percent of Classes 2b–3 truck sales, 75 percent of class 4-8 truck sales, and 40 percent of truck tractor sales. Because deliveries to the project and product deliveries would be made by trucks subject to this regulation, the project would benefit from these measures.

SB 375: SB 375 establishes mechanisms for the development of regional targets for reducing passenger vehicle GHG emissions. Under SB 375, CARB is required, in consultation with the State's Metropolitan Planning Organizations, to set regional GHG reduction targets for the passenger vehicle and light-duty truck sector for 2020 and 2035. As demonstrated in Table 4.7-5 below, the project would be consistent with SCAG RTP/SCS goals and objectives under SB 375.

Senate Bill X7-7: The Water Conservation Act of 2009 sets an overall goal of reducing per capita urban water use by 20 percent by December 31, 2020. Each urban retail water supplier shall develop water use targets to meet this goal. This is an implementing measure of the Water Sector of the AB 32 Scoping Plan. Reduction in water consumption directly reduces the energy necessary and the associated emissions to convene, treat, and distribute the water; it also reduces emissions from wastewater treatment. The project would utilize energy efficient appliances and equipment and would meet the applicable energy standards in the 2022 Title 24 Building Energy Efficiency Standards and CALGreen Code, or applicable version at the time of building permit issuance.

California Integrated Waste Management Act (IWMA) of 1989 and Assembly Bill (AB) 341: The IWMA mandated that State agencies develop and implement an integrated waste management plan which outlines the steps to be taken to divert at least 50 percent of their solid waste from disposal facilities. AB 341 directs CalRecycle to develop and adopt regulations for mandatory commercial recycling and sets a Statewide goal for 75 percent disposal reduction by the year 2020. GHG emissions related to solid waste generation from the project would benefit from this regulation as it would decrease the overall amount of solid waste disposed of at landfills. The decrease in solid waste would then in return decrease the amount of methane released from the decomposing solid waste. The project would be served by a solid waste collection and recycling service that would be required to comply with this requirement.

The CARB 2022 Scoping Plan For Achieving Carbon Neutrality, was approved in December 2022, and expands on prior Scoping Plans and recent legislations, such as AB 1279, by outlining a technologically feasible, cost-effective, and equity-focused path to achieve the State's climate target of reducing anthropogenic GHG emissions to 85 percent below 1990 levels and achieving carbon neutrality by 2045 or earlier (CARB 2022a). To achieve carbon neutrality by 2045, the 2022 Scoping Plan contains GHG reductions, technology, and clean energy mandated by statutes, reduction of short-lived climate pollutants, and mechanical carbon dioxide capture and sequestration actions. Table 4.7-6, Consistency Analysis with Applicable 2022 Scoping Plan Actions and Strategies, contains a list of GHG emission reduction actions and strategies from the 2022 Scoping Plan and describes the proposed project's consistency with them.

Table 4.7-6. Consistency Analysis with Applicable 2022 Scoping Plan Actions and Strategies

2022 Scoping Plan Action	Responsible Party(ies)	Consistency Analysis
 Transportation Technology Sector Achieve 100 percent ZEV sales of light duty vehicles by 2035 and medium heavy-duty vehicles by 2040. Achieve 20 percent zero-emission target for the aviation sector. 	State agencies and local agencies	No Conflict. Vehicles must transition to zero emission technology to decarbonize the transportation sector. Executive Order N-79-20 reflects the urgency of transitioning to zero emission vehicles (ZEVs) by establishing target dates for reaching 100 percent ZEV sales or fleet transitions to ZEV technology. EO N-79-20 calls for 100 percent ZEV sales of new light-duty vehicles

Table 4.7-6. Consistency Analysis with Applicable 2022 Scoping Plan Actions and Strategies

2000 Cooping Plan Action	Responsible	Consistency Analysis
 Develop a rapid and robust network of ZEV refueling infrastructure to support needed transition to ZEVs. Ensure that the transition of ZEV technology is affordable for low income households and communities of color, and meets the needs of communities and small business. Prioritize incentive funding for heavy-duty ZEV technology deployment in regions of the state with the highest concentrations of harmful criteria and toxic air contaminant emissions. Promote private investment in the transition to ZEV technology, undergirded by regulatory certainty such as infrastructure credits in the Low Carbon Fuel Standard for hydrogen and electricity and hydrogen station grants from the CEC's Clean Transportation Program pursuant to Executive Order B-48-18. Evaluate and continue to offer incentives similar to those through FARMER, Carl Moyer, the Clean Fuel Reward Program, the Community Air Protection Program, the Low Carbon Transportation, including CORE. Where feasible, prioritize and increase funding for clean transportation equity programs. Continue and accelerate funding support for zero emission vehicles and refueling infrastructure through 2030 to ensure the rapid transformation of the transportation sector. 	Party(ies)	by 2035. The Advanced Clean Cars II regulation fulfills this goal and serves as the primary mechanism to help deploy ZEVs. A number of existing incentive programs also support this transition, including the Clean Cars 4 All Program. EO N-79-20 also sets targets for transitioning the me—ium- and heavy-duty fleet to zero emissions: by 2035 for drayage trucks and by 2045 for buses and heavy-duty long-haul trucks where feasible. Replacing heavy-duty vehicles with ZEV technology will significantly reduce GHG emissions and diesel PM emissions in low-income communities and communities of color adjacent to ports, distribution centers, and highways. The existing Advanced Clean Trucks regulation, paired with the proposed Advanced Clean Fleets regulation, are designed to transition a significant amount of the Off-road vehicles rely heavily on ICE technology and EO N-79-20 sets an off-road equipment target of transitioning the entire fleet to ZEV technology by 2035, where feasible. There are a number of funding sources available to support this transition, including FARMER, Carl Moyer, and Community Air Protection Incentives; as well as Low Carbon Transportation Incentives, including the Clean Off-Road Equipment (CORE) program. Refueling infrastructure is a crucial component of transforming transportation technology. Electric vehicle chargers and hydrogen refueling stations must become easily accessible for all drivers to support a wholesale transition to ZEV technology. Deployment of ZEV refueling infrastructure is currently supported by a number of existing local and state public funding mechanisms. Intrastate aviation relies on ICE technology today, but battery-electric and hydrogen fuel cell aviation applications are in development, along with sustainable aviation fuel.

Table 4.7-6. Consistency Analysis with Applicable 2022 Scoping Plan Actions and Strategies

	Responsible		
2022 Scoping Plan Action	Party(ies)	Consistency Analysis	
		GHG emissions generated by project- related passenger and truck vehicular travel would benefit from the above regulations and programs, and mobile source emissions generated by the proposed project would be reduced as automobiles and truck fleets are transitioned to ZEV technology. Additionally, the project would include EV charging stations in accordance with regulations which would support the transition to EV technology. Thus, the Project would not conflict with actions under the transportation technology sector.	
Transportation Fuels Sector	State agencies		
 Accelerate the reduction and replacement of fossil fuel production and consumption in California. Incentivize private investment in new zero-carbon fuel production in California. Incentivize the transition of existing fuel production and distribution assets to support deployment of low- and zero-carbon fuels while protecting public health and the environment. Invest in the infrastructure to support reliable refueling for transportation such as electricity and hydrogen refueling. Evaluate and propose, as needed, changes to strengthen the Cap-and-Trade Program. Initiate a public process focused on options to increase the stringency and scope of the LCFS: Evaluate and propose accelerated 	State agencies and local agencies	No Conflict. The state needs to support low-carbon liquid fuels for much harder sectors for ZEV technology such as aviation, locomotives, and marine applications. Biomethane currently displaces fossil fuels in transportation and will largely be needed for hard-to-decarbonize sectors but will likely continue to play a targeted role in some fleets while the transportation sector transitions to ZEVs. Private investment in alternative fuels will play a key role in diversifying the transportation fuel supply away from fossil fuels. EO N-79-20 calls on state agencies to support the transition of existing fuel production facilities away from fossil fuels and directs that this transition also protects and supports workers, public health, safety, and the environment. In line with this direction, existing refineries could be repurposed to produce sustainable aviation fuel, renewable diesel, and hydrogen.	
 carbon intensity targets pre-2030 for LCFS. Evaluate and propose further declines in LCFS post-2030 carbon intensity targets to align with this 2022 Scoping Plan. Consider integrating opt-in sectors into the program. Provide capacity credits for hydrogen and electricity for heavy-duty fueling. Monitor for and ensure that raw materials used to produce low-carbon fuels or 		GHG emissions generated by project- related passenger and delivery trucks would benefit from the above regulations and programs, and mobile source emissions generated by the Project would be reduced with implementation of the wider use of zero-carbon fuels consistent with reduction of GHG emissions under AB 1279. Additionally, the project would utilize energy efficiency appliances and equipment and will meet the applicable	

Table 4.7-6. Consistency Analysis with Applicable 2022 Scoping Plan Actions and Strategies

	Daananaihla	
2022 Scoping Plan Action	Responsible Party(ies)	Consistency Analysis
technologies do not result in unintended consequences.		energy standards in the Title 24 Building Energy Efficiency Standards and CALGreen Code, or applicable version at the time of building permit issuance and will install ENERGY STAR compliant appliances which will reduce the amount of fossil fuel use and GHG emissions. During construction the Project will encourage emission reduction strategies, including alternative fueled vehicles, during operations the Project will secure on-site bicycle parking, construct a Class II bike lane, provide improvements to the pedestrian network, and provide effective internet access to encourage telecommuting and alternative work schedules. Thus, the Project would not conflict with actions in the transportation fuels sector.
Vehicles Miles Traveled Sector	State agencies	Consistent. Managing total demand for
 Achieve a per capita VMT reduction of at least 25 percent below 2019 levels by 2030 and 30 percent below 2019 levels by 2045. Reimagine new roadway projects that decrease VMT in a way that meets community needs and reduces the need to drive. Invest in making public transit a viable alternative to driving by increasing affordability, reliability, coverage, service frequency, and consumer experience. Implement equitable roadway pricing strategies based on local context and need, reallocating revenues to improve transit, bicycling, and other sustainable transportation choices Expand and complete planned networks of high-quality active transportation infrastructure. Channel the deployment of autonomous vehicles, ride-hailing services, and other new mobility options toward high passenger-occupancy and low VMT-impact service models that complement transit and ensure equitable access for priority populations. 	and local agencies	transportation energy by reducing the miles people need to drive on a daily basis is also critical as the state aims for a sustainable transportation sector in a carbon neutral economy. VMT reductions will play an indispensable role in reducing overall transportation energy demand and achieving the state's climate, air quality, and equity goals. CARB did not set regulatory limits on VMT in the 2022 Scoping Plan because the authority to reduce VMT largely lies with state, regional, and local transportation, land use, and housing agencies, along with the Legislature and its budgeting choices. The Wiley Canyon Mixed-Use development would introduce senior housing, multifamily housing, commercial, and publicly accessible outdoor recreational space. The project also includes secure on-site bicycle parking, construction of a Class I bike trail and restriping of Calgrove Boulevard to provide Class II bike lanes to access the other parts of the City through the existing bicycle infrastructure, improvements to the pedestrian network, and effective internet access to encourage telecommuting and alternative work schedules all of which will help reduce VMTs. The project also

Table 4.7-6. Consistency Analysis with Applicable 2022 Scoping Plan Actions and Strategies

2022 Scoping Plan Action	Responsible Party(ies)	Consistency Analysis
 Streamline access to public transportation through programs such as the California Integrated Travel Project. Ensure alignment of land use, housing, transportation, and conservation planning in adopted regional plans, such as regional transportation plans (RTP)/ sustainable communities strategies (SCS), regional housing needs assessments (RHNA), and local plans (e.g., general plans, zoning, and local transportation plans), and develop tools to support implementation of these plans. Accelerate infill development and housing production at all affordability levels in transportation-efficient places, with a focus on housing for lower income residents. 		complies with the general plan and the City's need for additional housing. Furthermore, the project is located within a half mile of public transit; City of Santa Clarita Transit Routes 4, 4, 6, and 14. These routes will allow residents to access the Newhall Metrolink station and McBean Regional Transit Center. Overall, the project results in a VMT reduction of 30.1 percent for both the residential portion and the employment portion of the project (Stantec 2022). Thus, the Project supports a reduction in VMT in accordance with the goals of the 2022 Scoping Plan. As such, the Project supports actions under the vehicle miles traveled sector.
 Clean Electricity Grid Sector Use long-term planning processes (Integrated Energy Policy Report, IRP, CAISO Transmission Planning Process, AB 32 Climate Change Scoping Plan) to support grid reliability and expansion of renewable and zero-carbon resource and infrastructure deployment. Complete systemwide and local reliability assessments across CAISO and other balancing authority areas, using realistic assumptions for land use, build rates, statewide and distribution system level constraints, and energy needs. Such assessments should be completed before state agencies update their electricity sector GHG targets. Prioritize actions to mitigate impacts to electricity reliability and affordability and provide sufficient flexibility in the state's decarbonization roadmap for adjustments as may be needed. Facilitate long lead-time resource development through the IRP and the SB 100 interagency process and through technology development and demonstration funding376 that includes 	State agencies and local agencies	No Conflict. Decarbonizing the electricity sector depends on both using energy more efficiently and replacing fossil-fueled generation with renewable and zero carbon resources, including solar, wind, energy storage, geothermal, biomass, and hydroelectric power. The RPS Program and the Cap-and-Trade Program continue to incentivize dispatch of renewables over fossil generation to serve state demand. SB 100 increased RPS stringency to require 60 percent renewables by 2030 and for California to provide 100 percent of its retail sales of electricity from renewable and zero-carbon resources by 2045. Furthermore, SB 1020 has added interim targets to SB 100's policy framework to require renewable and zero-carbon resources to supply 90 percent of all retail electricity sales by 2035 and 95 percent of all electricity retail sales by 2040; establish a planning goal of at least 20 GW of offshore wind by 2045; and that state agencies plan for an energy transition that avoids the need for new fossil gas capacity to meet California's long-term energy goals. California also continues to advance its appliance and building energy efficiency

 $^{^{\}rm 11}$ $\,$ Santec, 2022. Wiley Canyon Mixed-Use Project VMT Analysis Memo, July 11.

Table 4.7-6. Consistency Analysis with Applicable 2022 Scoping Plan Actions and Strategies

Table 4.7-6. Consistency Analysis with Applicable 2022 Scoping Plan Actions and Strategies

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2022 Scoping Plan Action	Party(ies)	Consistency Analysis
		actions under the clean electricity grid sector.
Sustainable Manufacturing and Buildings Industry Sector	State agencies and local	No Conflict. Fossil gas is the primary gaseous fossil fuel used to produce heat at
	_	gaseous fossil fuel used to produce heat at industrial facilities, as well as in residential and commercial buildings. Gaseous fossil fuel use can be displaced by four primary alternatives: zero-carbon electricity, solar thermal heat, hydrogen, and biogas/biomethane. The 2022 Scoping Plan reduces dependence on fossil gas in the industrial and building sectors by transitioning substantial energy demand to alternative fuels. Combustion of fossil gas, other gaseous fossil fuels, and solid fossil fuels provide energy to meet three broad industry needs: electricity, steam, and process heat. Non-combustion emissions result from fugitive emissions and from the chemical transformations inherent to some manufacturing processes. About 20 percent of the GHG emissions from the industrial sector are non-combustion emissions. Decarbonizing industrial facilities depends upon displacing fossil fuel use with a mix of electrification, solar thermal heat, biomethane, low- or zero-carbon hydrogen, and other low-carbon fuels to provide energy for heat and reduce combustion emissions. Emissions also can be reduced by implementing energy efficiency measures and using substitute raw materials that can reduce energy demand and some process emissions. Some remaining combustion emissions and some non-combustion CO2 emissions can be captured and sequestered. This sector has a continuing demand for fossil gas due to lack of non-combustion technologically feasible or cost-effective alternatives for certain industrial sectors. Microgrids powered by renewable resources and with battery storage are emerging as a key enabler of electrification and
Superior Energy Performance program, and ISO 50001.		decarbonization at industrial facilities. The Project will utilize energy efficiency
 Evaluate and continue to offer incentives to install energy efficiency and renewable 		appliances and equipment and will meet the applicable energy standards in the Title

Table 4.7-6. Consistency Analysis with Applicable 2022 Scoping Plan Actions and Strategies

und strategies		
	Responsible	
2022 Scoping Plan Action	Party(ies)	Consistency Analysis
energy technologies through programs such as CPUC decisions as part of rulemaking R.19-09-009393 and the CEC's Food Production Investment Program (FPIP) and EPIC programs. Leverage low-carbon hydrogen programs, including the Bipartisan Infrastructure Law, for regional hydrogen hubs, hydrogen electrolysis, and hydrogen manufacturing and recycling. Evaluate the role of hydrogen in meeting GHG emission reductions, including policy recommendations regarding the use of hydrogen in California as required by SB 1075. Address cost barriers to promote low-carbon fuels for hard-to-electrify industrial applications.		24 Building Energy Efficiency Standards and CALGreen Code, or applicable version at the time of building permit issuance and will install ENERGY STAR compliant appliances. During construction the Project will encourage emission reduction strategies, including alternative fueled vehicles, during operations the Project will secure on-site bicycle parking, construct a Class II bike lane, provide improvements to the pedestrian network, and provide effective internet access to encourage telecommuting and alternative work schedules. The Project will include components that will reduce VMT by 30.1 percent through a combination of GHG reduction strategies to encourage walking, biking, carpooling, alternative fueled vehicle use, and transit use which will decrease fossil fuel consumption. As such, the proposed project would not conflict with sustainable manufacturing buildings industry sector.
 Sustainable Manufacturing and Buildings Building Sector Prioritize California's most vulnerable residents with the majority of funds in the new \$922 million Equitable Building Decarbonization program, created through the 2022-2023 state budget. This would include residents in frontline, low-income, disadvantaged, rural, and tribal communities. This program is dedicated to a statewide direct-install building retrofit program for low-income households to replace fossil fuel appliances with electric appliances, energy-efficient lighting, and building insulation and sealing while also coordinating reductions in gas infrastructure in specific geographic areas. Achieve three million all-electric and electric-ready homes by 2030 and seven million by 2035 with six million heat pumps installed statewide by 2030. 	State agencies and local agencies	Consistent. Achieving carbon neutrality includes transitioning away from fossil gas in residential and commercial buildings and relying primarily on advancing energy efficiency while replacing gas appliances with non-combustion alternatives. This transition includes trimming back the existing gas infrastructure, so pockets of gas-fueled residential and commercial buildings do not require ongoing maintenance of the entire limb for gas delivery. Blending low-carbon fuels such as hydrogen and biomethane into the pipeline further displaces fossil gas. Pipeline safety and reliability must be evaluated to accommodate low-carbon fuels. This transition is achieved when all new buildings constructed include non-combustion appliances, and appliances in existing buildings are replaced at the end of their useful life with non-combustion alternatives. The project would have to comply with the 2022 CalGreen Code which requires, where applicable, electric heat pumps, electric-

Table 4.7-6. Consistency Analysis with Applicable 2022 Scoping Plan Actions and Strategies

	Responsible	
2022 Scoping Plan Action	Party(ies)	Consistency Analysis
 Expand incentive programs to support the holistic retrofit of existing buildings, especially for vulnerable communities. Ensure that incentive programs prioritize energy affordability and tenant protections, promote affordable and lowincome household retrofits that improve habitability and reduce expenses, protect and empower small landlords and homeowners, address overlooked consumer groups, and pair decarbonization with other critically needed renovation efforts to ensure that buildings support human health and are climate- and weather-resistant. End fossil gas infrastructure expansion for newly constructed buildings. Evaluate and propose, as needed, changes to strengthen the Cap-and-Trade Program. Strengthen California's building standards to support zero-emission new construction. Develop building performance standards for existing buildings. Adopt a zero-emission standard for new space and water heaters sold in California beginning in 2030, as specified in the 2022 State Strategy for the State Implementation Plan. Expand use of low-GWP refrigerants within buildings. Support electrification with changes to utility rate structures and by promoting load management programs. Increase funding for incentive programs and expand financing assistance programs focused on existing buildings and appliance replacements. Expand consumer education efforts to raise awareness and stimulate the adoption of decarbonized buildings and appliances, especially in vulnerable 	Responsible Party(ies)	ready homes, solar PV system and battery storage requirements, and building ventilation requirements which would all reduce the reliance on fossil fuels and prepare for all electric buildings. The Project would be consistent with policies or actions to decarbonize the building sector under the sustainable manufacturing buildings building sector.
 adoption of decarbonized buildings and appliances, especially in vulnerable communities. Implement biomethane procurement 		
targets for investor-owned utilities as specified in SB 1440 (Hueso, Chapter 739, Statutes of 2018) to reduce GHG		

Table 4.7-6. Consistency Analysis with Applicable 2022 Scoping Plan Actions and Strategies

2022 Scoping Plan Action	Responsible Party(ies)	Consistency Analysis
emissions in remaining pipeline gas and reduce methane emissions from organic waste.		
 Implement SB 905 Convene a multi-agency Carbon Capture and Sequestration Group comprised of federal, state, and local agencies to engage with environmental justice advocates, tribes, academics, researchers, and community representatives to identify the current status, concerns, and outstanding questions concerning CCS, and develop a process to engage with communities to understand specific concerns and consider guardrails to ensure safe and effective deployment of CCS. Iteratively update the CARB CCS Protocol with the best available science and implementation experience. Incorporate CCS into other sectors and programs beyond transportation where cost-effective and technologically feasible options are not currently available and to achieve the 85 percent reduction in anthropogenic sources below 1990 levels as called for in AB 1279. Evaluate and propose, as appropriate, financing mechanisms and incentives to address market barriers for CCS and CDR. Evaluate and propose, as appropriate, the role for CCS in cement decarbonization (SB 596) and as part of hydrogen production pathways (SB 1075). Support carbon management infrastructure projects through core CEC research, development, and demonstration (RD&D) programs. Continue to explore carbon capture applications for producing or leveraging zero-carbon power for reliability needs as part of SB 100. Consider carbon capture infrastructure when developing hydrogen roadmaps and strategy, especially for non-electrolysis hydrogen production. 	State agencies and local agencies	No Conflict. The deployment of CDR to counterbalance hard-to-abate residual emissions is unavoidable if net zero CO2 or GHG emissions are to be achieved. Modeling shows that emissions from the AB 32 GHG Inventory sources will continue to persist even if all fossil related combustion emissions are phased out. These residual emissions must be compensated for to achieve carbon neutrality either with CDR, which includes both sequestration in natural and working lands and mechanical approaches like direct air capture, CCS, which is carbon capture from anthropogenic point sources involves capturing carbon from a smokestack of an emitting facility, or direct air capture, which captures carbon directly from the atmosphere. The Project would not conflict with measures to increase carbon dioxide removal and capture. As such, the Project would not conflict with action under the carbon dioxide removal and capture and capture sector.

Table 4.7-6. Consistency Analysis with Applicable 2022 Scoping Plan Actions and Strategies

2022 Scoping Plan Action	Responsible Party(ies)	Consistency Analysis
 Evaluate and streamline permitting barriers to project implementation while protecting public health and the environment. Explore options for how local air quality benefits can be achieved when CCS is deployed. Explore opportunities for CCS and CDR developers to leverage existing infrastructure, including subsurface infrastructure. Explore permitting options to allow for scaling the number of sources at carbon sequestration hubs. 		
Short-Lived Climate Pollutants (Non- Combustion Gases) Dairy and Livestock Methane Sector	State agencies and local agencies	No Conflict. SLCPs include black carbon, methane, and fluorinated gases. HFCs are the fastest growing source of GHG
 Install state of the art anaerobic digesters that maximize air and water quality protection, maximize biomethane capture, and direct biomethane to sectors that are hard to decarbonize or as a feedstock for energy. Increase alternative manure management projects, including but not limited to conversion to "solid," "dry," or "scrape" manure management; installation of a compost-bedded pack barn; an increase in the time animals spend on pasture; and implementation of solid-liquid separation technology into flush manure management systems. Implement enteric fermentation strategies that are cost-effective, scientifically proven, safe for animal and human health, and acceptable to consumers, and that do not impact animal productivity. Provide financial incentives for these strategies as needed. Accelerate demand for dairy and livestock product substitutes such as plant-based or cell-cultured dairy and livestock products to achieve reductions in animal populations. In consideration of pace of deployment of methane mitigation strategies and the scale of complimentary incentives, 		emissions, primarily driven by their use to replace ozone-depleting substances and an increased demand for cooling and refrigeration. Dairy and livestock are the largest source of methane emissions followed by landfills. Black Carbon, soot, comes primarily from transportation, specifically heavy-duty vehicles followed by fuel combustion for residential, commercial, and industrial applications. The Project would not conflict with SLCP dairy and livestock methane sector actions in the 2022 Scoping Plan. The Project is a mixed-use development and does not include dairy or livestock. Thus, the Project would not conflict with actions under the SLCP dairy and livestock methane sector.

Table 4.7-6. Consistency Analysis with Applicable 2022 Scoping Plan Actions and Strategies

2022 Scoping Plan Action	Responsible Party(ies)	Consistency Analysis
consider regulation development to ensure that the 2030 target is achieved, assuming the conditions outlined in SB 1383 are met.		
 Short-Lived Climate Pollutants (Non-Combustion Gases) Landfill Methane Sector Maximize existing infrastructure and expand it to reduce landfill disposal, with strategies including composting, anaerobic digestion, co-digestion at wastewater treatment plants, and other non-combustion conversion technologies. Expand markets for products made from organic waste, including through recognition of the co-benefits of compost, biochar, and other products. Recover edible food to combat food insecurity. Invest in the infrastructure needed to support growth in organic recycling capacity. Utilize existing digesters at wastewater treatment facilities to rapidly expand food waste digestion capacity. Direct biomethane captured from landfills and organic waste digesters to sectors that are hard to decarbonize. Implement improved technologies and best management practices at composting and digestion operations. Reduce emissions from landfills through improvements in operational practices, lower permeability covers, advanced collection systems, and technologies to utilize landfill gas. Leverage advances in remote sensing capabilities to quickly pinpoint large methane sources and mitigate leaks, improve understanding of the factors that lead to better capture efficiency, and explore new technologies and practices that can reliably improve methane control at landfills. 	State agencies and local agencies	No Conflict. SB 1383 has a 75 percent organic waste disposal reduction target below the 2013 baseline by 2030. The state did not achieve the 50 percent reduction in organic waste disposal below 2014 levels by 2020. The CPUC approved a decision in February 2022 implementing the biomethane procurement program, which will require investor-owned utilities by 2025 to procure 17.6 billion cubic feet (BCF) of biomethane produced from organic wastes to support the landfill disposal reduction and SLCP target and reduce fossil gas reliance for residential and commercial customers. Organic waste will also be reduced by measure to remove edible food from the stream. Emissions can also be reduced by improvements in operational practices at landfills including lower permeability covers, advanced landfill gas collection systems, and increased monitoring to detect and repair leaks The Project is a mixed-use development and will comply with all recycling regulations. As such, the Project would not conflict with SLCP landfill methane sector actions in the 2022 Scoping Plan.
Short-Lived Climate Pollutants (Non- Combustion Gases) Upstream Oil and Gas Methane Sector	State agencies and local agencies	No Conflict. California is currently on track to achieve a 41 percent reduction in methane emission from oil and gas production by 2025 relative to 2013. To

Table 4.7-6. Consistency Analysis with Applicable 2022 Scoping Plan Actions and Strategies

	1	
	Responsible	
2022 Scoping Plan Action	Party(ies)	Consistency Analysis
 Mitigate emissions from leaks by regular leak detection and repair (LDAR) surveys at all facilities. Replace high emitting equipment with zero emission alternatives wherever feasible. Have CARB and CalGEM lead a Task Force to identify and address methane leaks from oil infrastructure near communities. Pursuant to SB 1137, develop leak detection and repair plans for facilities in health protection zones, implement emission detection system standards, and provide public access to emissions data. Minimize emissions from equipment that must vent fossil gas by design (e.g., fossil gas powered compressors). Install vapor collection systems on high emitting equipment. Phase out venting and routine flaring of associated gas (gas produced as a byproduct during oil production). Continuous ambient monitoring at fossil gas underground storage facilities to quickly detect large methane sources. Reduce pipeline and compressor blowdown emissions. Leverage advances in remote sensing capabilities to quickly pinpoint large methane sources and mitigate leaks. 		meet the 2030 target, regulatory requirements to further reduce intentional venting of fossil gas from equipment are needed. The Project is a mixed-use development and does not include any oil or gas production, processing, or storage facilities. The Project would not conflict with SLCP upstream oil and gas methane sector actions in the 2022 Scoping Plan.
Short-Lived Climate Pollutants (Non- Combustion Gases) Hydrofluorocarbons	State agencies and local	No Conflict. New targeted measures are needed to reduce HFCs, primarily from
Sector	agencies	high-GWP refrigerants, to meet 2045
 Expand the use of very low- or no-GWP technologies in all HFC end-use sectors, including emerging sectors, like heat pumps for applications other than space conditioning, to maximize the benefits of building decarbonization. Convert large HFC emitters such as existing refrigeration systems to the lowest practical GWP technologies. Prioritize small-scale and independent grocers serving priority populations in 	3	requirements. HFC emissions from new and existing sources need to be addressed in tandem with building decarbonization efforts to maximize reductions. The adoption of low-GWP refrigerants must occur in parallel with building decarbonization efforts. The sales prohibitions on newly produced refrigerants set forth in SB 1206 and the national/international HFC phasedown will help in reducing HFC emissions from existing equipment by restricting the supply

Table 4.7-6. Consistency Analysis with Applicable 2022 Scoping Plan Actions and Strategies

	Responsible	
2022 Scoping Plan Action	Party(ies)	Consistency Analysis
 2022 Scoping Plan Action addressing existing "banks" of high-GWP refrigerants Improve recovery, reclamation, and reuse of refrigerants by limiting sales of new or virgin high-GWP refrigerants and requiring the use of reclaimed refrigerants where appropriate. Assist low-income and disadvantaged communities in obtaining low-GWP space conditioning units to protect vulnerable communities from heat stress and wildfire smoke. Accelerate technology transitions in California and the U.S. overall by collaborating with international partners committed to taking action on HFCs under the Kigali Amendment to the Montreal Protocol; this includes addressing barriers to adoption of very low- or no-GWP refrigerant technologies such as high upfront costs, shortage of trained technicians, and lag in updating safety standards and building codes. 	Party(ies)	of and increasing the value of existing high-GWP HFCs. The Project is a mixed-use development that would comply with the 2022 CalGreen Code for energy efficiency and use of high-GWP refrigerants and would not conflict with these policies or actions. Thus, the Project would not conflict with SLCP hydrofluorocarbons sector actions in the 2022 Scoping Plan.
Short-Lived Climate Pollutants (Non-Combustion Gases) Anthropogenic Black Carbon Sector Reduce fuel combustion commensurate with state's climate and air quality programs, particularly from reductions in transportation emissions and agricultural equipment emissions. Invest in residential woodsmoke reduction.	State agencies and local agencies	No Conflict. Under current strategies, anthropogenic black carbon from transportation is expected to be reduced by over 60 percent in 2030. Continued reductions in combustion emissions across all sectors from both the state's climate and air quality programs will also reduce anthropogenic black carbon emissions. The Project is a mixed-use development that would not include fireplaces and would reduce VMTs which also results in a reduction of fuel combustion. As such, the Project would not conflict with SLCP anthropogenic black carbon sector actions in the 2022 Scoping Plan.
Natural and Working Lands: Strategies for all NWL Implement AB 1757 and SB 27. Implement the Climate Smart Strategy. Accelerate the pace and scale of climate smart action, consistent with the management levels identified above, as part of a collective effort between federal,	State agencies and local agencies	No Conflict. AB 1757 calls for the development of an ambitious range of targets for the NWL sector to be integrated into the Scoping Plan and other state policies. SB 27 directed CARB to establish CO2 removal targets for 2030 and beyond. In response to EO N-82-20 and AB 1757, the proposed target for NWL for 2045 is a

Table 4.7-6. Consistency Analysis with Applicable 2022 Scoping Plan Actions and Strategies

	Responsible	
2022 Scoping Plan Action	Party(ies)	Consistency Analysis
state, private, nonprofit, and individual land managers.		4 percent change in total carbon stock from 2014.
 Prioritize and practice equity, including 		
through meaningful community		The Project is a mixed-use development
engagement and prioritizing		which would not be constructed on any NWL. Thus, the Project would not conflict
implementation of nature-based solutions		with NWL strategies for all NWL actions
that benefit the communities most		under the 2022 Scoping Plan.
vulnerable to climate change.		
 Advance multi-benefit, collaborative, landscape-level approaches that engage 		
communities and landowners, and		
incorporate adaptive managements.		
 Consult and partner with California Native 		
American tribes to increase co-		
management and tribal management		
authority; restore, protect, and enhance natural cultural resources, traditional		
foods, and cultural landscapes; respect		
tribal sovereignty; and support tribes'		
implementation of tribal expertise and		
Traditional Ecological Knowledge and		
cultural easements.		
 Leverage existing innovative financial and market mechanisms, and explore new 		
ones, between the public, private, and		
philanthropic sectors to secure funding of		
climate smart land management.		
In partnership with communities, tribes,		
and the private sector, expand and		
develop new infrastructure for manufacturing and processing of climate		
smart agricultural and biomass products.		
 Leverage and support technical 		
assistance providers: such as the UC		
Cooperative Extension and California's 98		
Resource Conservation Districts, that		
have track records of providing technical		
assistance to local landowners and implementing agriculture, forestry, natural		
resource management, and restoration		
projects across the state.		
 Establish and expand mechanisms that 		
ensure NWL are protected from land		
conversion and parcelization (e.g.,		
conservation easements or Williamson		
Act), in line with the strategies outlined in CNRA's Pathways to 30x30 California.		
Pair land conservation projects with		

Table 4.7-6. Consistency Analysis with Applicable 2022 Scoping Plan Actions and Strategies

2022 Scoping Plan Action	Responsible Party(ies)	Consistency Analysis
management plans that increase carbon sequestration, where feasible. Increase opportunities for private and philanthropic investments in nature-based climate solutions, utilizing existing voluntary and compliance carbon markets, existing state and local programs, and the California Carbon Sequestration and Climate Resiliency Project Registry established pursuant to SB 27. Expand monitoring and tracking of management actions and outcomes consistent with the tracking and monitoring recommendations of the Climate Smart Strategy Natural and Working Lands: Forest Shrublands and Chaparral Accelerate the pace and scale of climate smart forest management to at least 2.3 million acres annually by 2025, in line with the climate smart management strategies identified in this Scoping Plan, the NWL Climate Smart Strategy, and the Wildfire and Forest Resilience Action Plan. Establish and expand mechanisms that ensure forests, shrublands, and grasslands are protected from land conversion and that support ongoing, rather than one-time, management actions. In collaboration with state and local agencies, accelerate the deployment of long-term carbon storage from waste woody biomass residues resulting from climate smart management, including storage in durable wood products, underground reservoirs, soil amendments, and other mediums. Expand infrastructure to facilitate processing of biomass resulting from climate smart management. Expand permit streamlining in collaboration with state and local agencies to accelerate implementation of	State agencies and local agencies	No Conflict. California is covered by 27 percent forests and 31 percent shrublands and chaparral. Climate smart management can help make forests more resilient to climate change and less prone to catastrophic wildfire. Climate-smart management in shrublands and chaparral face can provide protection for threatened communities and natural resources. The Project is a mixed-use development which would not be constructed on any NWL where forests, shrublands, and chaparral occur. Thus, the Project would not conflict with NWL strategies for forest, shrublands, and chaparral actions under the 2022 Scoping Plan.

Table 4.7-6. Consistency Analysis with Applicable 2022 Scoping Plan Actions and Strategies

2022 Scoping Plan Action	Responsible Party(ies)	Consistency Analysis
climate smart forest management while protecting natural resources.		
 Natural and Working Lands: Grasslands Establish and expand mechanisms that ensure grasslands are protected from land conversion/parcelization and that support ongoing, rather than one-time, management actions that improve carbon sequestration. Deploy grassland management strategies, like prescribed grazing, compost application, and other regenerative practices, to support soil carbon sequestration, biodiversity, and other ecological improvements. Increase adoption of compost production on farms and application of compost in appropriate grassland settings for improved vegetation and carbon storage, and to deliver waste diversion goals through nature-based solutions. 	State agencies and local agencies	No Conflict. California is covered by 9 percent grasslands. The protection of grasslands provides an opportunity to reduce sprawl and complement VMT reduction strategies. Climate smart strategies can increase grassland resilience to climate change by improving species diversity and maintaining or increasing soil carbon stocks. The Project is a mixed-use development project which would not be constructed on any NWL where grasslands occur. As such, the Project would not conflict with NWL strategies for grasslands actions under the 2022 Scoping Plan.
 Natural and Working Lands: Croplands Accelerate the pace and scale of healthy soils practices to 80,000 acres annually by 2025, conserve at least 8,000 acres of annual crops annually, and increase organic agriculture to 20 percent of all cultivated acres by 2045. Utilize the recommendations included in CDFA's Farmer and Rancher-Led Climate Change Solutions report to accelerate deployment of healthy soils practices, organic farming, and climate smart agriculture practices. Establish or expand financial mechanisms that support ongoing deployment of healthy soils practices and organic agriculture. Support strategies that achieve cobenefits of safer, more sustainable pest management practices and the health and preservation of ecosystems, such as implementing the California Department of Pesticide Regulation's (DPR's) Sustainable Pest Management Work Group recommendations. 	State agencies and local agencies	No Conflict. California is covered by 9 percent croplands. In addition to food, croplands provide considerable carbon storage in the soil and, in perennial croplands, in aboveground biomass. Climate smart practices can maintain or increase the climate resilience of cropland productivity through improved soil conditions and increased pollinator habitat. The Project is a mixed-use development project which would not be constructed on any NWL where croplands currently occur. Therefore, the Project would not conflict with NWL strategies for croplands actions under the 2022 Scoping Plan.

Table 4.7-6. Consistency Analysis with Applicable 2022 Scoping Plan Actions and Strategies

	Responsible	
2022 Scoping Plan Action	Party(ies)	Consistency Analysis
 Conduct research on the intersection of pesticides, soil health, GHGs, and pest resiliency via a multi-agency effort with DPR, CDFA, and CARB. Conduct outreach and education to develop and facilitate the increased adoption of safer, more sustainable pest management practices and tools; reduce the use of harmful pesticides; promote healthy soils; improve water and air quality; and reduce public health impacts. In collaboration with state and local agencies, accelerate the deployment of alternatives to agricultural burning that increase long-term carbon storage from waste agricultural biomass, including storage in durable wood products, underground reservoirs, soil amendments, and other mediums. Work across state agencies to reduce regulatory and permitting barriers around some healthy soils practices (e.g., composting), where appropriate. Utilize innovative agriculture energy use and carbon monitoring and planning tools to reduce on-farm GHG emissions from energy and fertilizer application or to increase carbon storage, as well as to promote on-farm energy production opportunities. 		
 Restore 60,000 acres of Delta wetlands annually by 2045 to reduce methane emissions from wetlands and reverse the resulting subsidence. Identify and prioritize wetland restoration efforts around climate vulnerable communities. Leverage other funding and institutions to support wetland restoration projects, including land trusts, local funding, federal funding, and private and philanthropic funding to support wetlands restoration projects. Work across state agencies to reduce regulatory and permitting barriers around 	State agencies and local agencies	No Conflict. California is covered by 2 percent wetlands. Wetlands are hotspots for diversity, contain considerable carbon in the soil, are critical to the states' water supply, and protect upland areas from flooding due to sea level rise and storms. Climate smart strategies to restore and protect wetlands can reduce emissions while simultaneously improving the climate resilience of surrounding areas and improving the water quality and yield for the state. The Project is a mixed-use which would not be constructed on any NWL where wetlands occur. Thus, the Project would not conflict with NWL strategies for wetlands actions under the 2022 Scoping Plan.

Table 4.7-6. Consistency Analysis with Applicable 2022 Scoping Plan Actions and Strategies

2022 Scoping Plan Action	Responsible Party(ies)	Consistency Analysis
wetland restoration projects, where appropriate.		
 Natural and Working Lands: Developed Lands Increase urban forestry investment annually by 200 percent, relative to business as usual. Increase public awareness of urban forest benefits and, where appropriate, prioritizing irrigation of trees over lawns. Provide technical assistance and resources to disadvantaged communities to implement community urban greening projects to provide equitable access to the benefits of urban greening projects. Work with state and local agencies to expand technical assistance for and enforcement of the defensible space requirements of PRC 4291 to reduce wildfire risk to homes and structures. 	State agencies and local agencies	No Conflict. California is covered by 6 percent developed lands. Developed lands include urban, suburban, and rural areas, as well as transportation and supporting infrastructure. The vegetation within cities and communities are all part of developed lands. This vegetation provides numerous benefits to surrounding areas, including carbon storage, air and water filtration, reduced urban heat island effect, and access to nature, Climate smart strategies to protect and expand the urban forests, landscaping, green spaces, parks, and associated vegetation can increase their climate resilience and the benefits Californians derive from them. Urban forests have a significant potential to sequester carbon.
		The Project will be constructed on developed land and concentrated on approximately 18 acres of a 32-acre Project Site in order to preserve natural drainage, recreation and open space. Approximately 15 acres of natural and improved open space will be provided within the Project Site. As such, the Project would not conflict with NWL strategies for developed lands actions under the 2022 Scoping Plan.
Natural and Working Lands: Vegetated Lands Establish and expand mechanisms that ensure sparsely vegetated lands are protected from land conversion, prioritizing those areas most vulnerable to climate change and loss.	State agencies and local agencies	No Conflict. California is covered by 10 percent sparsely vegetated lands. Vegetated lands include deserts, beaches, dunes, bare rock, and areas covered in ice and snow. Vegetated lands provide limited carbon storage, but nonetheless, are important for open space, unique habitats, and recreational opportunities.
Source: Appendix B.		The Project is a mixed-use project which would not be constructed on vegetated lands. Thus, the Project would not conflict with NWL strategies for vegetated lands actions under the 2022 Scoping Plan.

Source: Appendix B.

As show above in Table 4.7-6, the project would not conflict with applicable 2022 Scoping Plan actions that serve to achieve the State's climate target of reducing anthropogenic emissions to 85 percent below 1990 levels and achieving carbon neutrality by 2045.

These potential strategies include the decarbonization of every sector of the economy which will require rapidly moving to zero-emission transportation for cars, buses, trains, and trucks; phasing out the use of fossil gas for heating; clamping down on chemicals and refrigerants; providing communities with sustainable options such as walking, biking, and public transit to reduce reliance on cars; continuing to build out solar arrays, wind turbine capacity, and other resources to provide clean, renewable energy to displace fossil-fuel fired electrical generation; scaling up new options such as renewable hydrogen for hard-to-electrify end uses and biomethane where needed. The project would benefit from Statewide and utility-provider efforts towards increasing the portion of electricity provided from renewable resources. As previously discussed, the utility provider for the project, SCE, currently provides 42 percent of electricity via carbon-free resources and will be required to comply with SB 100 to meet future targets. The project would comply with water and energy standards as detailed in the 2022 Title 24 Building Energy Efficiency Standards and the CALGreen Code. The project would also benefit from Statewide efforts towards increasing the fuel economy standards of vehicles. Additionally, reductions in VMT from project components would result in a 30.1 percent decrease in VMT for both the residential and employment portions of the project which is below the regional VMT threshold (Stantec 2022). While CARB is in the process of expanding the regulatory framework to meet the 2045 reduction target based on the existing laws and strategies in the 2022 Scoping Plan, the project would not conflict with implementation of these potential GHG reduction strategies with regard to energy identified by CARB for all the reasons summarized in Table 4.7-6, above.

With Statewide efforts underway to facilitate the State's achievement of those goals, it is reasonable to expect the project's GHG emissions to decline from their opening year levels as reported in Table 4.7-5 as the regulatory initiatives identified by CARB in the 2022 Scoping Plan are implemented, and other technological innovations occur. Stated differently, the project's emissions at buildout likely represents the maximum emissions for the project as anticipated regulatory developments and technology advances are expected to reduce emissions associated with the project, such as emissions related to electricity use and vehicle use. Based on the analysis above, the project would not conflict with the 2022 Scoping Plan, including implementation of project components. Therefore, project impacts would be **less than significant**.

SCAG's 2016 RTP/SCS and 2020-2045 RTP/SCS (Connect SoCal)

Transportation-related GHG emissions would be the largest source of emissions from the project. This finding is consistent with the findings in regional plans, including the 2016 RTP/SCS, which recognizes that the transportation sector is the largest contributor to the State's GHG emissions. SCAG's 2016 RTP/SCS was most recently updated with the 2020–2045 RTP/SCS, or Connect SoCal, which is the applicable plan adopted for the purpose of reducing GHGs.

The purpose of the SCAG 2016 RTP/SCS is to achieve the regional per capita GHG reduction targets for the passenger vehicle and light-duty truck sector established by CARB pursuant to SB 375 (SCAG 2016a). The 2016 RTP/SCS seeks "improved mobility and accessibility... to reach desired destinations with relative ease and within a reasonable time, using reasonably available transportation choices" (SCAG 2016b). The 2016 RTP/SCS seeks to implement "strategies focused on compact infill development, superior placemaking (the process of creating public spaces that are appealing), and expanded housing and transportation choices" (SCAG 2016b). As part of the 2016 RTP/SCS, "transportation network improvements would be included, and more compact, infill, walkable and mixed-use development strategies to accommodate new region's growth would be encouraged to accommodate increases

in population, households, employment, and travel demand" (SCAG 2016a). Moreover, the 2016 RTP/SCS states that while "[p]opulation and job growth would induce land use change (development projects) and increase VMT, and would result in direct and indirect GHG emissions," the 2016 RTP/SCS would "supports sustainable growth through a more compact, infill, and walkable development pattern" (SCAG 2016a).

Similarly, Connect SoCal seeks improved mobility and accessibility and seeks to implement strategies that "alleviates development pressure in sensitive resource areas by promoting compact, focused infill development in established communities with access to high-quality transportation" (SCAG 2020a). The 2020–2045 RTP/SCS includes "more compact, infill, walkable and mixed-use development strategies to accommodate new region's growth would be encouraged to accommodate increases in population, households, employment, and travel demand" (SCAG 2020d). Moreover, the 2020-2045 RTP/SCS states the focus would be "growth in existing urban regions and opportunity areas, where transit and infrastructure are already in place. Locating new growth near bikeways, greenways, and transit would increase active transportation options and the use of other transit modes, thereby reducing number of vehicle trips and trip lengths and associated emissions" (SCAG 2020d).

The project would include the construction of sidewalks and site improvements such as landscaping enhancements along Wiley Canyon Road and Hawkbryn Avenue fronting the project site. Sidewalks would connect to the surrounding pedestrian system and include street and pedestrian lighting for safety. Pedestrian access to the project site would be provided along Wiley Canyon Road and Hawkbryn Avenue. Bicycle facilities serving the project vicinity include an existing Class II bike lane on Calgrove Boulevard east of Wiley Canyon Road and on Wiley Canyon Road north of Lyons Avenue. There is also a paseo with access on Wiley Canyon Road opposite Tournament Road and on the north side of Lyons Avenue between Avenida Entrana and Avenida Rotella. The project would provide a Class I bike trail from the project site south to Calgrove Boulevard, and Calgrove Boulevard would be restriped to provide Class II bike lanes to connect cyclists at the project site to other parts of the city with existing bike infrastructure. Bicycle parking and alternative fueled vehicle spaces would be provided at the project site consistent with the 2022 Title 24 Building Energy Efficiency Standards and CALGreen Code. The project additionally would have access to four existing local Santa Clarita Transit routes (Line 4, Line 5, Line 6, and Line 14). Additionally, the project would either make or contribute its fair share to improvements at four intersections to reduce transportation impacts to below thresholds. The resulting reductions in VMT from project components would be a 17.4 percent decrease in VMT for both the residential and employment portions of the project which is below the regional VMT threshold (Stantec 2020).

Table 4.7-7, Project Consistency with Applicable Policies of the 2020–2045 Regional Transportation Plan/Sustainable Communities Strategy, provides a detailed analysis of applicable RTP-SCS policies. As shown in the table, the project would not conflict with applicable 2020–2045 RTP/SCS goals and strategies intended to improve mobility and access to diverse destinations and reduce vehicular demand and associated emissions. As such, the project would not conflict with the applicable GHG reduction-related goals and strategies contained in the 2020–2045 RTP/SCS, and impacts would be **less than significant**.

Table 4.7-7. Project Consistency with Applicable Goals of SCAG's 2020-2045 RTP/SCS

Goal	Would the Project conflict?
Improve mobility, accessibility, reliability, and travel safety for people and goods.	No Conflict. The Project includes the development of 596 residential units; including a 217-unit Senior Living Facility, a 379 multi-family residential units, up to 10,886 square feet of commercial, and approximately 15 acres of natural and improved

Table 4.7-7. Project Consistency with Applicable Goals of SCAG's 2020-2045 RTP/SCS

Goal	Would the Project conflict?
	open space within the approximately. 32-acre Project Site. As described in the Wiley Canyon Mixed-Use Traffic Analysis(Stantec 2020), the Project will implement components to reduce residential and employment VMT impacts. Project components include constructing sidewalks and trails within the development and site improvements such as landscaping enhancements along roads fronting the Project Site. Sidewalks will connect to the surrounding pedestrian system and include street and pedestrian lighting for safety. Pedestrian access to the Project Site will be provided along Wiley Canyon Road and Hawkbryn Avenue. Bicycle facilities include an existing Class II bike lane on Calgrove Boulevard east of Wiley Canyon Road and on Wiley Canyon Road north of Lyons Avenue. There is also a paseo with access on Wiley Canyon Road opposite Tournament Road and on the north side of Lyons Avenue between Avenida Entrana and Avenida Rotella. The Project will provide a Class I bike trail from the Project site south to Calgrove Boulevard, and Calgrove Boulevard will be restriped to provide Class II bike lanes to connect cyclists at the Project site to other parts of the city with existing bike infrastructure. Bicycle parking and alternative fueled vehicle spaces will be provided at the Project site consistent with the 2022 Title 24 Building Energy Efficiency Standards and CALGreen Code. The Project site additionally has access to four existing local Santa Clarita Transit routes (Line 4, Line 5, Line 6, and Line 14). Additionally, the Project will either make or contribute its fair share to improvements at four intersections to reduce transportation impacts to below thresholds. The Project's residents and guests will be located near the 1-5 and have easy access to the City of Santa Clarita, the City of Santa Clarita's transit options (bus, rail), and the greater Los Angeles area. Project components will reduce VMT by 17.4 percent for both the residential and employment portions of the Project through a combination of GHG reduction strate
Enhance the preservation, security, and resilience of the regional transportation system.	No Conflict. See discussion above regarding the Project's location near the I-5 and the provision of pedestrian and bicycle amenities near the Project's residential uses. The proximity of the Project Site to various transportation modes would support the region's transportation investment and the sustainability of the regional transportation system in support of this goal.
Increase person and goods movement and travel choices within the transportation system.	No Conflict. See discussion above regarding the Project's location near the I-5 and the provision of pedestrian and bicycle amenities near the Project's residential uses. These Project characteristics would not conflict with the goal to increase in person and goods movement and travel choices within the transportation system.

Table 4.7-7. Project Consistency with Applicable Goals of SCAG's 2020-2045 RTP/SCS

Goal	Would the Project conflict?
Reduce greenhouse gas emissions and improve air quality.	No Conflict. The Project will meet or exceed the applicable requirements of the Title 24 Building Energy Efficiency Standards and CALGreen Code or applicable version at the time of building permit issuance. The Project will provide accessible and electric vehicle parking per City and CALGreen Code requirements. As described above, the Project will include components that will reduce VMT by 17.4 percent through a combination of GHG reduction strategies to encourage walking, biking, carpooling, alternative fueled vehicle use, and transit use (Stantec 2020). Based on the above, the Project's design and characteristics will serve to reduce GHG emissions and improve air quality, in support of this goal.
Support healthy and equitable communities.	No Conflict. As noted above, the Project includes components to reduce greenhouse gas emissions impacts, including compliance with the Title 24 Building Energy Efficiency Standards and CALGreen Code. The provision of pedestrian and bicycle amenities, provision of on-site rental housing assisted living/memory care and independent senior citizens and for-sale multi-family residential housing, and proximity to existing open space with trail connections will support this goal to support healthy and equitable communities.
Adapt to changing climate and support an integrated regional development pattern and transportation network.	No Conflict. See discussion above regarding the Project's location near the I-5 and the provision of pedestrian and bicycle amenities near the Project's residential uses. The Project's development will support an integrated regional development pattern and transportation network which will in turn serve to reduce GHG emissions in support of this goal.
Leverage new transportation technologies and data-driven solutions that result in more efficient travel.	Not Applicable/No Conflict. This goal pertains to SCAG leveraging new transportation technologies and data-driven solutions that result in more efficient travel. The Project will not adversely affect SCAG's ability to develop more efficient travel consistent with this goal.
Encourage development of diverse housing types in areas that are supported by multiple transportation options.	No Conflict. See discussion above regarding the Project's location near the I-5 and the provision of pedestrian and bicycle amenities near the Project's residential uses. Additionally, the Project will be served by four bus lines. The Project includes the development of senior living, including independent, assisted, and memory care, as well as multi-family residential. As such, the Project will support this goal to encourage development of diverse housing types in areas that are supported by multiple transportation options.
Promote conservation of natural and agricultural lands and restoration of habitats.	No Conflict. Of the 32-acre Project site, 15 acres will be natural and improved open space. The Project site is zoned Mixed-Use Neighborhood (MX-N) in the City General Plan. The Project site has no corresponding zone in the County and is currently zoned Mixed-Use Overlay (MU) in the City of Santa Clarita. The Project site was used as a mule farm and is currently vacant. It is not considered as agricultural lands. The Project is retaining approximately 15 acres for use as natural drainage and improved open space for recreation. As such, the development of the Project will not conflict

Table 4.7-7. Project Consistency with Applicable Goals of SCAG's 2020-2045 RTP/SCS

Goal	Would the Project conflict?	
	with this goal to promote conservation of natural agricultural lands and restoration of habitats.	

Source: Appendix B

City of Santa Clarita General Plan

The City of Santa Clarita General Plan (City of Santa Clarita 2011) serves as a foundation for making land use decisions based on goals and policies related to land use, transportation, population growth and distribution, development, open space, resource preservation and utilization, air and water quality, noise impacts, public safety, infrastructure, and other related physical, social, and economic factors over the next 20 years. As previously discussed, the City has identified goals and policies in the City of Santa Clarita General Plan Conservation and Open Space element that address GHG emissions reductions. Table 4.7-8, Consistency with Applicable City of Santa Clarita General Plan, contains a list of GHG-reducing strategies that are applicable to the project. The analysis describes the consistency of the project with the General Plan. As shown in Table 4.7-8, the project is consistent with the City's General Plan; as such, impacts would be **less than significant**.

Table 4.7-8. Consistency with City of Santa Clarita General Plan

Actions and Strategies	Responsible Party	Compliance/Consistency Analysis	
Los Angeles County General Plan			
Goal CO 8: Development designed to improve energy efficiency, reduce energy and natural resource consumption, and reduce emissions of greenhouse gases.	City of Santa Clarita	No Conflict/Not Applicable. The Project will comply with the State and City's requirements to reduce GHG emissions through AB 32 and SB 375. The Project will	
Objective CO 8.1: Comply with the requirements of State law, including AB 32, SB 375 and implementing regulations, to reach targeted reductions of greenhouse gas (GHG) emissions.		adhere to the statewide and City's regulations related to the Climate Change Scoping Plan listed in Table 6 . The Project will meet or exceed the applicable requirements of Title 24, Part 6, as well as the California Green Building Standards	
Policy CO 8.1.1: Create and adopt a Climate Action Plan within 18 months of the One Valley		Code in Title 24, Part 11. As such, the Project will not conflict with this goal.	
One Vision adoption date of the City's General Plan Update that meets State requirements and includes the following components.		Policy CO 8.1.1 is a City requirement and does not pertain to the Project. The Project will not conflict with the goals of the Climate	
A. Plans and programs to reduce GHG		Action Plan, see discussion below.	
emissions to State-mandated targets, including enforceable reduction measures, a. The CAP may establish goals beyond 2020, which are consistent with the applicable laws and regulations		As shown in Table 7 , the Project will not conflict with the RTP/SCS regional GHG emissions reduction targets required by SB 375.	
referenced in this paragraph and based on current science. b. The CAP shall include specific and general tools and strategies to reduce		Policy CO 8.1.3 is a City action; however, the Project supports energy conservation as the Project will meet or exceed the applicable requirements of Title 24, Part 6, as well as	

Table 4.7-8. Consistency with City of Santa Clarita General Plan

Actions and Strategies	Responsible Party	Compliance/Consistency Analysis
Los Angeles County General Plan		
the City's current and projected 2020 inventory and to meet the CAPs target for GHG reductions by 2020.		the California Green Building Standards Code in Title 24, Part 11. Thus, the Project will not conflict with this policy.
 c. The CAP shall consider, among other GHG reduction strategies, the feasibility of development fees; incentive and rebate programs; and voluntary and mandatory reduction strategies in areas of energy efficiency, renewable energy, water conservation and efficiency, solid waste, land use and transportation. B. Mechanisms to ensure regular review of progress towards the emission reduction targets established by the Climate Action Plan, C. Procedures for reporting on progress to officials and the public, D. Procedures for revising the plan as needed to meet GHG emissions reduction targets; and, E. Allocation of funding and staffing for Plan implementation. 		Policies CO 8.1.4 and CO 8.1.5 are City requirements and do not pertain to the Project. The Project will not conflict with these policies.
After adoption of the Climate Action Plan, amend this General Plan if necessary to ensure consistency with the adopted Climate Action Plan.		
Policy CO 8.1.2: Participate in the preparation of a regional Sustainable Communities Strategy (SCS) Plan to meet regional targets for greenhouse gas emission reductions, as required by SB 375.		
Policy CO 8.1.3 Revise codes and ordinances as needed to address energy conservation, including but not limited to the following:		
 A. Strengthen building codes for new construction and renovation to achieve a higher level of energy efficiency, with a goal of exceeding energy efficiency beyond that required by Title 24, B. Adopt a Green Building Program to encourage green building practices and materials, along with appropriate ordinances and incentives, C. Require orientation of buildings to maximize passive solar heating during 		
cool seasons, avoid solar heat gain during		

Table 4.7-8. Consistency with City of Santa Clarita General Plan

	Responsible	
Actions and Strategies	Party	Compliance/Consistency Analysis
Los Angeles County General Plan		
 hot periods, enhance natural ventilation, promote effective use of daylight, and optimize opportunities for on-site solar generation, D. Encourage mitigation of "he "heat is" and" effect through use of cool roofs, light-colored paving, and shading to reduce energy consumption for air conditioning. 		
Policy CO 8.1.4: Provide information and education to the public about energy conservation and local strategies to address climate change.		
Policy CO 8.1.5: Coordinate various activities within the community and appropriate agencies related to GHG emissions reduction activities.		
Objective CO 8.2: Reduce energy and materials consumption and greenhouse gas emissions in public uses and facilities.	City of Santa Clarita	Not Applicable/No Conflict. Although these policies pertain primarily to City owned buildings or public buildings and do not
Policy CO 8.2.1: Ensure that all new City buildings, and all major renovations and additions, meet adopted green building standards, with a goal of achieving the LEED (Leadership in Energy and Environmental Design) Silver rating or above, or equivalent where appropriate.		pertain to the Project, the Project will not conflict with these policies. The Project will meet or exceed the applicable requirements of Title 24, Part 6, as well as the California Green Building Standards Code in Title 24, Part 11 to reduce energy usage and GHG emissions. The Project will adhere to City requirements regarding maximum lighting
Policy CO 8.2.2: Ensure energy efficiency of existing public buildings through energy audits and repairs and retrofit buildings with energy efficient heating and air conditioning systems and lighting fixtures, with a goal of completing energy repairs in City facilities by 2012.		levels and may utilize downward-directed lighting and low-reflective paving surfaces where appropriate and feasible. The Project will reduce heat island effects by planting trees and using hardscapes in and around parking lots and possibly through the use of
Policy CO 8.2.3: Support purchase of renewable energy for public buildings, which may include installing solar photovoltaic systems to generate electricity for city buildings and operations and other methods as deemed appropriate and feasible, in concert with significant energy conservation efforts.		light-colored reflective paving and roofing systems. The Project will implement recycling. As such, the Project will not conflict with these policies.
Policy CO 8.2.4: Establish maximum lighting levels for public facilities and encourage reduction of lighting levels to the level needed for security purposes after business hours, in		

Table 4.7-8. Consistency with City of Santa Clarita General Plan

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Actions and Strategies	Responsible Party	Compliance/Consistency Analysis
Los Angeles County General Plan		
addition to use of downward-directed lighting and use of low-reflective paving surfaces.		
Policy CO 8.2.5: Support installation of photovoltaic and other renewable energy equipment on public facilities, in concert with significant energy conservation efforts.		
Policy CO 8.2.6: Promote use of solar lighting in parks and along paseos and trails, where practical.		
Policy CO 8.2.7: Support the use of sustainable alternative fuel vehicles for machinery and fleets, where practical, by evaluating fuel sources, manufacturing processes, maintenance costs and vehicle lifetime use.		
Policy CO 8.2.8: Promote the purchase of energy-efficient and recycled products, and vendors and contractors who use energy-efficient vehicles and products, consistent with adopted purchasing policies.		
Policy CO 8.2.9: Reduce heat islands through installation of trees to shade parking lots and hardscapes, and use of light-colored reflective paving and roofing surfaces.		
Policy CO 8.2.10: Support installation of energy-efficient traffic control devices, street lights, and parking lot lights.		
Policy CO 8.2.11: Implement recycling in all public buildings, parks, and public facilities, including for special events.		
Policy CO 8.2.12: Provide ongoing training to appropriate City employees on sustainable planning, building, and engineering practices.		
Policy CO 8.2.13: Support trip reduction strategies for employees as described in the Circulation Element.		
Policy CO 5.2.14: Reduce extensive heat gain from paved surfaces through development standards wherever feasible.		
Objective CO 8.3: Encourage the following green building and sustainable development	City of Santa Clarita	No Conflict. The Project will meet or exceed the applicable requirements of Title 24, Part 6, as well as the California Green Building Standards Code in Title 24, Part 11 to

Table 4.7-8. Consistency with City of Santa Clarita General Plan

Actions and Strategies	Responsible Party	Compliance/Consistency Analysis		
Los Angeles County General Plan				
practices on private development projects, to the extent reasonable and feasible. Policy CO 8.3.1: Evaluate site plans proposed for new development based on energy efficiency pursuant to LEED (Leadership in Energy and Environmental Design) standards for New Construction and Neighborhood Development, including the following: a) location efficiency; b) environmental preservation; c) compact, complete, and connected neighborhoods; and d) resource efficiency, including use of recycled materials and water.	development incorporating residential, commercial, and open space elements to connect it to the community. The Project would provide water efficiency features for indoor water usage that include use of ENERGY STAR appliances and water fixture that would reduce water usage and have a corresponding reduction in wastewater generation. The Project would adhere to Circequirements regarding passive solar heating and cooling techniques. Trees will be utilized throughout the Project site to reduce heating and cooling energy loads and to provide shade for buildings and parking lots. The Project will adhere to City requirements regarding maximum lighting levels and may utilize downward-directed lighting and low-reflective paving surfaces where appropriate and feasible. The Project will reduce heat island effects by planting trees and using hardscapes in and around	The Project will retain approximately15 acres as natural drainage an open space out of 32 acres. The Project is a mixed-use development incorporating residential, commercial, and open space elements to connect it to the community. The Project would provide water efficiency features for indoor water usage that include use of ENERGY STAR appliances and water fixtures that would reduce water usage and have a		
Policy CO 8.3.2: Promote construction of energy efficient buildings through requirements for LEED certification or through comparable alternative requirements as adopted by local ordinance.				
Policy CO 8.3.3: Promote energy efficiency and water conservation upgrades to existing non-residential buildings at the time of major remodel or additions.		lighting and low-reflective paving surfaces where appropriate and feasible. The Project will reduce heat island effects by planting trees and using hardscapes in and around parking lots and possibly through the use of light-colored reflective paving and roofing systems. As such, the Project will not		
Policy CO 8.3.4: Encourage new residential development to include on-site solar photovoltaic systems, or pre-wiring, in at least 50% of the residential units, in concert with other significant energy conservation efforts.				
Policy CO 8.3.5: Encourage on-site solar generation of electricity in new retail and office commercial buildings and associated parking lots, carports, and garages, in concert with other significant energy conservation efforts.				
Policy CO 8.3.6: Require new development to use passive solar heating and cooling techniques in building design and construction, which may include but are not limited to building orientation, clerestory windows, skylights, placement and type of windows, overhangs to shade doors and windows, and use of light colored roofs, shade trees, and paving materials.				
Policy CO 8.3.7: Encourage the use of trees and landscaping to reduce heating and cooling				

Table 4.7-8. Consistency with City of Santa Clarita General Plan

Table 4.7-0. Consistency with city of		
Actions and Strategies	Responsible Party	Compliance/Consistency Analysis
Los Angeles County General Plan		
energy loads, through shading of buildings and parking lots.		
Policy CO 8.3.8: Encourage energy-conserving heating and cooling systems and appliances, and energy-efficiency in windows and insulation, in all new construction.		
Policy CO 8.3.9: Limit excessive lighting levels and encourage a reduction of lighting when businesses are closed to a level required for security.		
Policy CO 8.3.10: Provide incentives and technical assistance for installation of energy-efficient improvements in existing and new buildings.		
Policy CO 8.3.11: Consider allowing carbon off- sets for large development projects, if appropriate, which may include funding off-site projects or purchase of credits for other forms of mitigation, provided that any such mitigation shall be measurable and enforceable.		
Policy CO 8.3.12: Reduce extensive heat gain from paved surfaces through development standards wherever feasible.		
Objective CO 8.4: Reduce energy consumption for processing raw materials by promoting recycling and materials recovery by all residents and businesses throughout the community.	City of Santa Clarita	Not Applicable/No Conflict. Although these policies pertain primarily to the City, the Project will not conflict with these policies. The Project will provide mandatory recycling containers to its residents in proper enclosures and will provide proper recycling containers in public spaces. Additionally, the Project will recycle at least 65 percent of its construction and demolition debris in
Policy CO 8.4.1: Encourage and promote the location of enclosed materials recovery facilities (MRF) within the Santa Clarita Valley.		
Policy CO 8.4.2: Adopt mandatory residential recycling programs for all residential units, including single-family and multi-family dwellings.		accordance with city requirements. As such, the Project will not conflict with these policies.
Policy CO 8.4.3: Allow and encourage composting of greenwaste, where appropriate.		
Policy CO 8.4.4: Promote commercial and industrial recycling, including recycling of construction and demolition debris.		
Policy CO 8.4.5: Develop and implement standards for refuse and recycling receptacles		

Table 4.7-8. Consistency with City of Santa Clarita General Plan

Actions and Strategies	Responsible Party	Compliance/Consistency Analysis
Los Angeles County General Plan		
and enclosures to accommodate recycling in all development.		
Policy CO 8.4.6: Introduce and assist with the placement of receptacles for recyclable products in public places, including at special events.		
Policy CO 8.4.7: Provide information to the public on recycling opportunities and facilities and support various locations and events to promote public participation in recycling.		
Policy CO 8.4.8: Take an active role in promoting, incubating, and encouraging businesses that would qualify under the Recycling Market Development Zone program or equivalent, including those that manufacture products made from recycled products, salvage, and resource recovery business parks.		

Source: Appendix B

City of Santa Clarita Climate Action Plan

The City's adopted CAP provides a local threshold of significance for GHG emissions that would constitute a significant impact under CEQA. Because the CAP was only certified through 2020 and the project would be anticipated to become operational in 2025, the CAP is not applicable for a consistency analysis. However, the goals, objectives, and policies approved under the General Plan are forecast to meet the GHG emissions reduction targets mandated by AB 32 and SB 32, for which the CAP GHG significance threshold is based upon. Therefore, development projects that can demonstrate consistency with the General Plan will by association demonstrate consistency with the CAP and AB 32. Table 4.7-8, above, illustrates that the project would not conflict with applicable policies in the City's General Plan and by association the CAP. As such, impacts would be **less than significant.**

City of Santa Clarita Green Building Standards Code

The project would comply with the City of Santa Clarita Green Building Codes as discussed below. The project would meet or exceed the applicable requirements of Title 24, Part 6, as well as the California Green Building Standards Code in Title 24, Part 11 to reduce energy usage and GHG emissions. The project would provide water efficiency features for indoor water usage that include use of ENERGY STAR appliances and water fixtures that would reduce water usage and have a corresponding reduction in wastewater generation. The project would adhere to City requirements regarding passive solar heating and cooling techniques. Trees would be utilized throughout the project site to reduce heating and cooling energy loads and to provide shade for buildings and parking lots. The project would adhere to City requirements regarding maximum lighting levels and may utilize downward-directed lighting and low-reflective paving surfaces where appropriate and feasible. The project would reduce heat island effects by planting trees and using hardscapes in and around parking lots and possibly through the use of light-

colored reflective paving and roofing systems. Additionally, the project would provide accessible and electric vehicle parking as well as secure on-site bicycle parking, construction of a Class II bike lane, and improvements to the pedestrian network. The project would also comply with eh Construction and Demolition Ordinance by recycling at a minimum 65% of all inert materials and 65% of all other materials. As such, the project would comply with the City's Green Building Codes, and impacts would be **less than significant**.

Conclusion

In summary, the consistency analysis presented above demonstrates that the project is consistent with or would not conflict with the plans, policies, regulations, and GHG reduction action/strategies outlined in the 2208, 2014, and 2017 Scoping Plans, 2020–2045 RTP/SCS, the Santa Clarita General Plan, and Santa Clarita Green Building Standards Code. Since the project is consistent and does not conflict with these plans, policies, and regulations, the project's incremental increase in GHG emissions would not result in a significant impact on the environment. Therefore, project impacts related to consistency with plans, policies and regulations are **less than significant**, and no mitigation is required.

4.7.6 Mitigation Measures

Impacts would be less than significant; as such, no mitigation is required.

4.7.7 Level of Significance After Mitigation

Impacts would be less than significant; as such, no mitigation is required.

4.7.8 Cumulative Effects

Although the project is expected to emit GHGs, the emission of GHGs by a single project into the atmosphere is not itself necessarily an adverse environmental effect. Rather, it is the increased accumulation of GHG from more than one project and many sources in the atmosphere that may result in global climate change. The resultant consequences of that climate change can cause adverse environmental effects. A project's GHG emissions typically would be very small in comparison to state or global GHG emissions and, consequently, they would, in isolation, have no significant direct impact on climate change. The State has mandated a goal of reducing Statewide emissions to 1990 levels by 2020 and reducing Statewide emissions to 40 percent below 1990 levels by 2030, even though Statewide population and commerce are predicted to continue to expand. In order to achieve this goal, CARB is in the process of establishing and implementing regulations to reduce Statewide GHG emissions. Currently, there are no applicable CARB, SCAQMD, or City of Santa Clarita significance thresholds or specific reduction targets, and no approved policy or guidance to assist in determining significance at the project or cumulative levels. Additionally, there is currently no generally accepted methodology to determine whether GHG emissions associated with a specific project represent new emissions or existing, displaced emissions. Therefore, consistent with CEQA Guidelines Section 15064h(3), 12 the City, as lead agency, has determined that the project's contribution to cumulative GHG emissions and global climate change would be less than significant if the project is consistent with the applicable regulatory plans and policies to reduce GHG emissions: the 2022 Climate Change Scoping Plan, SCAG 2020-2045 RTP/SCS, and Santa Clarita General Plan.

As outlined above in Section 4.7.5, Impact Analysis, the project would be consistent with the applicable regulatory plans and policies to reduce GHG emissions with regard to mobile sources. The project would be consistent with energy efficiency, water use, and waste goals from compliance with the 2022 Title 24 Building Energy Efficiency Standards and CALGreen Code. Additionally, project control measures would reduce residential and employment VMT miles by 17.4 percent. Thus, the project would not contribute to a cumulatively considerable significant impact. Cumulative impacts would be **less than significant**.

4.7.9 References Cited

14 CCR 15000–15387 and Appendices A–L. Guidelines for Implementation of the California Environmental Quality Act, as amended.

24 CCR Part 6. California Energy Code. Sacramento, California: California Building Standards Commission.

March 2010. ISBN 978-1-58001-976-7. Effective January 1, 2011. Accessed August 2016.

http://www.documents.dgs.ca.gov/bsc/Title_24/documents/2010/Part%206/2010-CA-Energy.pdf.

As indicated above, the State CEQA Guidelines were amended in response to SB 97. In particular, the State CEQA Guidelines were amended to specify that compliance with a GHG emissions reduction program renders a cumulative impact insignificant. Per State CEQA Guidelines Section 15064(h)(3), a project's incremental contribution to a cumulative impact can be found not cumulatively considerable if the project will comply with an approved plan or mitigation program that provides specific requirements that will avoid or substantially lessen the cumulative problem within the geographic area of the project. To qualify, such a plan or program must be specified in law or adopted by the public agency with jurisdiction over the affected resources through a public review process to implement, interpret, or make specific the law enforced or administered by the public agency. Examples of such programs include a "water quality control plan, air quality attainment or maintenance plan, integrated waste management plan, habitat conservation plan, natural community conservation plan, [and] plans or regulations for the reduction of greenhouse gas emissions."

- Anderegg, William R. L., J.W. Prall, J. Harold, S.H., Schneider. 2010. Expert Credibility in Climate Change, Proceedings of the National Academy of Sciences of the United States of America. 2010 (27) 12107–12109. Accessed November 1, 2021. https://www.pnas.org/content/107/27/12107.
- Cal EPA. 2006. California Environmental Protection Agency (Cal EPA) Climate Action Team, Climate Action Team Report to Governor Schwarzenegger and the Legislature. Accessed November 21, 2021. https://research.fit.edu/media/site-specific/researchfitedu/coast-climate-adaptation-library/united-states/west-coast-amp-hawaix27i/california---statewide/Bonner-et-I.--2--0.--Climate-Action-Team-Report-to-State-Officials.pdf.
- Cal EPA. 2013, Preparing California for Extreme Heat: Guidance and Recommendations. Accessed November 1, 2021. https://healthyplacesindex.org/wp-content/uploads/2018/02/2013_cph_preparing_california_for_extreme_eat.pdf.
- California Department of Finance. 2020. E-6. Population estimates and components of change by county 2010-2020. Accessed November 1, 2021. http://www.dof.ca.gov/Forecasting/Demographics/Estimates/E-6/.
- Cal-Adapt. 2022. Local Climate Change Snapshot Santa Clarita California, United States. http://cal-adapt.org.
- California Legislative Information. 2022a. AB-1279 The California Climate Crisis Act. Accessed January 2023.https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=202120220AB1279.
- California Legislative Information. 2022b. SB-1020 Clean Energy, Jobs, and Affordability Act of 2022. Accessed January 2023. https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=202120220SB1020.
- California Legislative Information. 2022c. SB-1075 Hydrogen: green hydrogen: emissions of greenhouse gases. Accessed January 2023. https://leginfo.legislature.ca.gov/faces/billTextClient.xhtml?bill_id=202120220SB1075.
- California Public Resources Code Sections 40000-40511. Part 1. Integrated Waste Management.
- CalRecycle (California Department of Resources Recycling and Recovery). 2012. AB 341 Final Statement of Reasons: Mandatory Commercial Recycling Regulations. Accessed August 2016. http://www.calrecycle.ca.gov/
- CAPCOA (California Air Pollution Control Officers Association). 2008. CEQA & Climate change: Evaluating and Addressing Greenhous Gas Emissions from Projects Subject to the California Environmental Quality Act.
- CAPCOA. 2021. California Emissions Estimator Model, User's Guide For CalEEMod Version 2020.4.0. Accessed November 1, 2021. http://www.aqmd.gov/caleemod/user's-guide.
- CARB (California Air Resources Board). 2002. "AB 1493." Accessed October 2020. https://ww2.arb.ca.gov/californias-greenhouse-gas-vehicle-emission-standards-under-assembly-bill-1493-2002-pavley.

- CARB. 2010. Staff Report: Initial Statement of Reasons for Rulemaking, Revisions to the Regulation for Mandatory Reporting of Greenhouse Gas Emissions Pursuant to the California Global Warming Solutions Act of 2006 (AB 32), page 27. https://www.arb.ca.gov/regact/2010/ghg2010/ghgisor.pdf. Accessed November1, 2021.
- CARB. 2013. *Amendments to California Cap-and-Trade Program*. April 9. Accessed October 2020. https://ww2.arb.ca.gov/sites/default/files/classic//cc/capandtrade/linkage/resolution13-7.pdf.
- CARB. 2016. CARB 2016 Mobile Source Strategy. Accessed October 29, 2021. https://ww2.arb.ca.gov/resources/documents/2016-mobile-source-strategy.
- CARB. 2017a. California's 2017 Climate Change Scoping Plan. Accessed October 29, 2021. https://ww2.arb.ca.gov/our-work/programs/ab-32-climate-change-scoping-plan/2017-scoping-plan-documents.
- CARB. 2017b. Short-Lived Climate Pollutant Reduction Strategy. Accessed October 29, 2021. https://www.arb.ca.gov/cc/shortlived/meetings/03142017/final_slcp_report.pdf.
- CARB. 2018. SB 375 Regional Plan Climate Targets. Accessed October 29, 2021. https://ww2.arb.ca.gov/our-work/programs/sustainable-communities-program/regional-plan-targets.
- CARB. 2019. Low Carbon Fuel Standard and Alternative Diesel Fuels Regulation. Accessed October 29, 2021. https://www.arb.ca.gov/regact/2018/lcfs18/lcfs18.htm.
- CARB. 2020a. Advanced Clean Trucks Program, https://ww2.arb.ca.gov/our-work/programs/advanced-clean-trucks.
- CARB, 2020b. Executive Order G-20-239 Southern California Association of Governments (SCAG) 2020 Sustainable Communities Strategy CARB Acceptance of GHG Quantification Determination. Accessed October 29, 2021. https://ww2.arb.ca.gov/sites/default/files/2021-02/SCAG%202020% 20SCS%20CARB%20Acceptance%20of%20GHG%20Quantification%20Determination%20Executive% 20Order.pdf.
- CARB. 2021a. California Greenhouse Gas Emissions for 2000–2019 Trends of Emissions and Other Indicators. Accessed November 29, 2021. https://ww3.arb.ca.gov/cc/inventory/pubs/reports/2000_2019/ghg_inventory_trends_00-19.pdf.
- CARB. 2021b. Advanced Clean Cars Program, 2021. Accessed October 2022. https://ww2.arb.ca.gov/our-work/programs/advanced-clean-cars-program.
- CARB. 2022a. California Air Resources Board. 2022. 2022 Scoping Plan For Achieving Carbon Neutrality. Accessed December 19, 2022. Scoping Plan Update (ca.gov).
- CARB. 2022b. Final Environmental Analysis for the 2022 Scoping Plan for Achieving Carbon Neutrality. scoping plan (ca.gov). Accessed December 20, 2022.
- CBSC. 2019. 2019 CALGreen (Part 11 of Title 24). Accessed October 29, 2021. https://codes.iccsafe.org/content/CAGBSC2019/title-page.

- CBSC. 2023. 2022 California Green Building Standards Code. Accessed January 22, 2023. https://www.dgs.ca.gov/BSC/CALGreen.
- CCCC. 2006. California Climate Change Center. Our Changing Climate: Assessing the Risks to California. Accessed November 1, 2021. https://www.ucsusa.org/sites/default/files/2019-09/our-changing-climate-final.pdf.
- CEC. 2013. California Energy Efficiency Potential and Goals Study, Appendix Volume I. Accessed October 2018.http://www.cpuc.ca.gov/WorkArea/DownloadAsset.aspx?id=4021.
- CEC. 2022. CEC Building Energy Efficiency Standards. Accessed October 2022. https://www.energy.ca.gov/programs-and-topics/programs/building-energy-efficiency-standards/2022-building-energy-efficiency.
- City of Santa Clarita. 2000. General Plan Air Quality Element. Accessed October 27, 2021. https://www.santa-clarita.com/Home/ ShowDocument?id=3402.
- City of Santa Clarita. 2011. City of Santa Clarita General Plan. Accessed October 27, 2021. https://www.codepublishing.com/CA/SantaClarita/html/SantaClaritaGP/SantaClaritaGP.html.
- City of Santa Clarita. 2012. Climate Action Plan. August. Accessed May 2020. http://greensantaclarita.com/files/2012/10/APPROVED-CAP-AUGUST-2012.pdf.
- CNRA (California Natural Resources Agency). 2009. Final Statement of Reasons for Regulatory Action:

 Amendments to the State CEQA Guidelines Addressing Analysis and Mitigation of Greenhouse Gas

 Emissions Pursuant to SB 97. December 2009.
- CNRA. 2018. California Natural Resources Agency (CNRA) Safeguarding California Plan: 2018 Update to California's Climate Adaptation Strategy. Accessed December 15, 2021. https://resources.ca.gov/CNRALegacyFiles/docs/climate/safeguarding/update2018/safeguarding-california-plan-2018-update.pdf.
- CPUC. 2007. Waste Heat and Carbon Emissions Reduction Act. October. Accessed October 2020. http://www.leginfo.ca.gov/pub/07-08/bill/asm/ab_1601-1650/ab_1613_bill_20071014_chaptered.html.
- DWR (California Department of Water Resources). 2006. Progress on Incorporating Climate Change into Planning and Management of California's Water Resources, page 2-54. Accessed November. 1, 2021. https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=6454.
- EPA. 2019. *Inventory of U.S. Greenhouse Gas Emissions and Sinks* 1990–2017. EPA 430-R-19-001. April 11, 2019. Accessed May 2, 2019. https://www.epa.gov/sites/production/files/2019-04/documents/us-ghg-inventory-2019-main-text.pdf.
- IPCC. 2013. Climate Change 2013: The Physical Science Basis. Contribution of Working Group I to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change: Chapter 8: Anthropogenic and Natural Radiative Forcing. Accessed December 15, 2021. https://www.ipcc.ch/pdf/assessment-report/ar5/wg1/WG1AR5_Chapter08_FINAL.pdf.

- IPCC. 2014a. Climate Change 2014 Synthesis Report: A Report of the Intergovernmental Panel on Climate Change. Contribution of Working Groups I, II and III to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change. Accessed August 2016. http://www.ipcc.ch/report/ar5/syr/.
- IPCC. 2014b. Fifth Assessment Report, Summary for Policy Makers, page 5. https://www.ipcc.ch/site/assets/uploads/2018/02/AR5_SYR_FINAL_SPM.pdf. Accessed November 1, 2021.
- IPCC. 2021. Sixth Assessment Report, Summary for Policy Makers, page 5, Accessed November 1, 2021. https://www.ipcc.ch/report/ar6/wg1/downloads/report/IPCC_AR6_WGI_SPM.pdf.
- NHTSA. 2018. The Safer Affordable Fuel-Efficient 'SAFE' Vehicles Rule. March. Accessed October 2020. https://www.nhtsa.gov/corporate-average-fuel-economy/safe#:~:text=The%20Safer%20Affordable% 20Fuel%2DEfficient%20(SAFE)%20Vehicles%20Rule%2C,model%20years%202021%20through%202026.
- NHTSA. 2021. Corporate Average Fuel Economy. Accessed October 29, 2021. https://www.nhtsa.gov/laws-regulations/corporate-average-fuel-economy.
- NHTSA and USEPA, 2018. Federal Register / Vol. 83, No. 165 / Friday, August 24, 2018 / Proposed Rules, The Safer Affordable Fuel-Efficient (SAFE) Vehicles Rule for Model Years 2021–2026 Passenger Cars and Light Trucks. Accessed October 29, 2021. https://www.gpo.gov/fdsys/pkg/FR-2018-08-24/pdf/2018-16820.pdf.
- NRC. 2010. National Research Council, Advancing the Science of Climate Change. Accessed November 1, 2021. https://www.nap.edu/resource/12782/Science-Report-Brief-final.pdf.
- Office of the Governor. 2008. Executive Order S-14-08, November 17. Accessed October 29, 2021. https://perma.cc/7S5K-MQT8.
- OPR (Governor's Office of Planning and Research). 2008. CEQA and Climate Change: Addressing Climate Change through California Environmental Quality Act (CEQA) Review.
- Parmesan, C., and H. Galbraith. 2004. Observed Impacts of Global Climate Change in the U.S., Prepared for the Pew Center on Global Climate Change, November. https://www.c2es.org/site/assets/uploads/2004/11/observed-impacts-climate-change-united-states.pdf. Accessed November 1, 2021.
- PISD. 2003. Pacific Institute for Studies in Development (PISD) Environment and Security, Climate Change and California Water Resources: A Survey and Summary of the Literature. https://pacinst.org/wp-content/uploads/2003/07/
- SCAG. 2016a. Southern California Association of Governments, Program Environmental Impact Report 2016–2040 Regional Transportation Plan/Sustainable Communities Strategy, 2015.
- SCAG. 2016b. The 2016–2040 Regional Transportation Plan/Sustainable Communities Strategy.
- SCAG. 2020a. Southern California Association of Governments (SCAG) 2020–2045 Regional Transportation Plan/Sustainable Communities Strategy (2020–2045 RTP/SCS Accessed November 3, 2021. https://scag.ca.gov/read-plan-adopted-final-plan.

- SCAG. 2020b. 2020–2045 RTP/SCS Demographics and Growth Forecast Technical Report, September. https://scag.ca.gov/sites/main/files/file-attachments/0903fconnectsocal_demographics-and-growth-forecast.pdf?1606001579. Accessed October 29, 2021.
- SCAG. 2020c. 2020–2045 RTP/SCS Public Health Technical Report, September, page 53. . Accessed October 27, 2021. https://scag.ca.gov/sites/main/files/file-attachments/0903fconnectsocal_public-health.pdf?1606001755
- SCAG. 2020d. Program Environmental Impact Report 2020–2045 Regional Transportation Plan/Sustainable Communities Strategy, May 2020.
- SCAQMD (South Coast Air Quality Management District). 1993. CEQA Air Quality Handbook. April 1993.
- SCAQMD. 2008a. Draft Guidance Document Interim CEQA Greenhouse Gas (GHG) Significance Threshold.

 October 2008.
- SCAQMD. 2008b. SCAQMD Governing Board Meeting, December 5, 2008, Agenda No. 31. Accessed October 29, 2021. http://www3.aqmd.gov/hb/2008/December/0812ag.html.
- SCAQMD. 2008c. Greenhouse Gases, CEQA Significance Thresholds, Board Letter Interim CEQA GHG Significance Threshold for Stationary Sources, Rules and Plans, December 5, 2008, Agenda No. 3`. http://www.aqmd.gov/docs/default-source/ceqa/handbook/greenhouse-gases-(ghg)-ceqa-significance-thresholds/ghgboardsynopsis.pdf?sfvrsn=2. Accessed October 29, 2021. SCAQMD. 2010. "Greenhouse Gases CEQA Significance Thresholds Working Group Meeting No. 15." September 28, 2010. Accessed August 2016. http://www.aqmd.gov/docs/default-source/ceqa/handbook/greenhouse-gases-(ghg)-ceqa-significance-thresholds/year-2008-2009/ghg-meeting-15/ghg-meeting-15-main-presentation.pdf?sfvrsn=2.
- SCAQMD. 2008d. Greenhouse Gases CEQA Significance Thresholds. Accessed October 29, 2021. http://www.aqmd.gov/home/regulations/ceqa/air-quality-analysis-handbook/ghg-significance-thresholds.
- SCAQMD. 2019. South Coast Air Quality Management District, Greenhouse Gas CEQA Significance Threshold Stakeholder Working Group #12. http://www.aqmd.gov/docs/default-source/ceqa/handbook/greenhouse-gases-(ghg)-ceqa-significance-thresholds/year-2008-2009/ghg-meeting-12/ghg-meeting-12-minutes.pdf.
- SCE. 2020. 2020 Annual Report. Accessed December 2021. https://www.edison.com/content/dam/eix/documents/investors/sec-filings-financials/2020-eix-sce-annual-report.pdf.
- Stantec. 2022. Wiley Canyon Mixed-Use Traffic Analysis, July 11.
- The Climate Registry. 2016. General Reporting Protocol Version 2.1, (2016).
- United Nations. 2019. *United States of America: Withdrawal*. December 12. Accessed October 2020. https://treaties.un.org/doc/Publication/CN/2019/CN.575.2019-Eng.pdf.

- USEPA. 2021. Federal Register/Vol.86, No. 151/ Tuesday August 10, 2021/ Revised 2023 and Later Model Year Light-Duty Vehicle Greenhouse Gas Emissions Standards. Accessed October 29, 2021. https://www.govinfo.gov/content/pkg/FR-2021-08-10/pdf/2021-16582.pdf.
- USEPA and NHTSA. 2012. EPA and NHTSA Set Standards to Reduce Greenhouse Gases and Improve Fuel Economy for Model Years 2017–2025 Cars and Light Trucks. Accessed December 15, 2021. https://nepis.epa.gov/Exe/ZyPDF.cgi/P100EZ7C.PDF?Dockey=P100EZ7C.PDF.
- USGCRP. 2018. United States Global Change Research Program (USGCRP) Impacts, Risks, and Adaptation in the United States: Fourth National Climate Assessment, Volume II. Accessed December 15, 2021. https://nca2018.globalchange.gov/.

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4.8 Hazards and Hazardous Materials

This section describes the existing hazardous materials within the vicinity of the proposed Wiley Canyon Project (project) site, identifies associated regulatory requirements, evaluates potential impacts, and identifies mitigation measures related to implementation of the proposed project.

4.8.1 Environmental Setting

The existing conditions presented in this section are based on review of a Phase I Environmental Site Assessment (ESA) prepared for the project site in August 2004 and supplemented with a current review of environmental databases. The Phase I ESA is included as Appendix H of this EIR. The Phase I ESA included a search of available environmental records conducted by Environmental Data Resources Incorporated, however because of the age of this report, a review of current databases was performed used available resources from the Los Angeles Regional Water Quality Control Board (RWQCB), the Department of Toxic Substances Control (DTSC), and the Environmental Protection Agency (EPA). The database search in the Phase I identified facilities within a 1-mile radius of the project site that are known to have environmental concerns or are listed as facilities with permits to generate, handle, store, or dispose of hazardous materials. The Phase I ESA also included a review of historical aerial photographs which has also been updated through reviewing historical aerial photographs since 2004 to the present for any evidence of land use changes since preparation of the 2004 Phase I.

Site Description and History

The 31.8-acre project site is irregularly shaped and relatively level at an elevation of approximately 1,294 feet above mean sea level with a gentle slope towards the northeast. The project site is predominately undeveloped with past land uses that have mostly included agricultural (i.e., mule ranch and pasture land). Improvements include two primary structures on the northern end of the site that were constructed in 1978 and 1980 (Gabriel 2004). The two structures are constructed of metal and have in the past been used as shops for construction of wooden furniture and cabinets and before that, as barns for the ranch (Gabriel 2004). According to a review of historical aerial photographs there was an improvement shown in a 1952 photograph that appeared to be a pit/sump related to gas/oil well exploration (Gabriel 2004). However, a review of records did not indicate any permits or record of such activity at the project site. The closest wells to the site were found to be approximately 400 feet east of the site across Wiley Canyon Road and 500 feet north of the project site (Gabriel 2004).

Site Groundwater

According to the findings of the geotechnical investigation that was prepared for the project site, no natural seeps, or springs or indicators of near surface ground water were observed during the field investigation conducted in 2021 (Appendix E). An inactive ground water well on the site was identified according to the County of Los Angeles Department of Public Works (Appendix E). This water well had groundwater levels as high as 80 feet below the ground surface. During a 2007 geotechnical investigation, groundwater was reportedly encountered in 6 different borings ranging from about 58 to 66 feet below the ground surface within the central and northerly portions of the site. Shallower groundwater was encountered on other portions of the site ranging from 35 to 42 feet below the ground surface. Based on the historically highest ground water contours included in the Seismic Hazard Zone Report for the Oat Mountain 7.5-Minute Quadrangle, the interpolated historic high ground water elevation considered for the geotechnical investigation was approximately 30 feet beneath the existing ground surface (Appendix E).

Based on a review of the National Pipeline Mapping System Public Viewer there are no gas transmission pipelines or hazardous liquid pipelines mapped within the immediate vicinity of the project site (DOT 2022).

The Phase I ESA notes that based on the age of the current on-site structures, there is a potential for asbestos-containing materials or lead-based paint to occur at the site (Gabriel 2004).

Database Search and Agency Files

A database search was included in the 2004 Phase I ESA and did not discover any known hazardous materials use at the site or documented releases (Gabriel 2004). A more current review of available databases was conducted for the purposes of this document and included a review of the United States Environmental Protection Agency National Priorities List (NPL also referred to as Superfund Sites), State Water Resources Control Board (SWRCB and also known as Water Board) Geotracker database, the DTSC Envirostor database, Los Angeles County Public Works, and other databases included on the California Environmental Protection Agency's Cortese List Resources website.

According to the NPL database records, the project site is not included as a Superfund site (EPA 2022).

The Geotracker database which includes leaking underground storage tanks, cleanup program sites and military evaluations did not show the project site as a site with a known release or involved in cleanup activities (SWRCB 2022). The nearest site to the project site is the Busy Bee Cleaners located at 25235 Wiley Canyon Road, approximately a half-mile north of the northern boundary of the site and is listed on the cleanup program database. However, the current status of the case shows that it is eligible for closure (SWRCB 2022). This site is also in the presumable downgradient direction from the project site based on topography.

The Water Board also maintains a list of solid waste disposal sites where waste constituents are above hazardous waste levels outside the waste management unit. The project site was not included in this database (Cal EPA 2022a). In addition, the project site was not included in the list of Cease and Desist Orders or Cleanup and Abatement Orders from the Water Board (Cal EPA 2022b).

The project site is also not listed on the DTSC Envirostor database and there are no database listings within a mile of the project site (DTSC 2022).

According to the database listings from the Los Angeles County Department of Public Works, the project site is not listed under their database for online file review for the Industrial Waste, Underground Storage Tanks, and Stormwater programs (County of Los Angeles Public Works 2022).

Schools

There are no schools or daycare centers located within a quarter-mile of the project site. The nearest school or daycare facility to the project site is the Wiley Canyon Elementary School located approximately 0.35 miles north of the project site.

Airports

The nearest airport to the project site is Western Jet Aviation located approximately 5 miles to the northeast. As a result, the project site is not located within 2 miles of any Airport Land Use Plan.

4.8.2 Regulatory Framework

Federal

Comprehensive Environmental Response, Compensation, and Liability Act

The Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) of 1980 (42 USC 9601–9675), was enacted by Congress on December 11, 1980. This law provided broad federal authority to respond directly to releases or threatened releases of hazardous substances that may endanger public health or the environment. CERCLA established requirements concerning closed and abandoned hazardous waste sites, provided for liability of persons responsible for releases of hazardous waste at these sites, and established a trust fund to provide for cleanup when no responsible party could be identified. Through CERCLA, the U.S. Environmental Protection Agency (EPA) was given power to seek out those parties responsible for any release and assure their cooperation in the cleanup. EPA cleans up orphan sites when potentially responsible parties cannot be identified or located, or when they fail to act. Through various enforcement tools, EPA obtains private-party cleanup through orders, consent decrees, and other small-party settlements. EPA is authorized to implement CERCLA in all 50 states and U.S. territories. Superfund site identification, monitoring, and response activities in states are coordinated through the state environmental protection or waste management agencies.

Emergency Planning and Community Right-to-Know Act

Authorized by Title III of the Superfund Amendments and Reauthorization Act, the Emergency Planning and Community Right-to-Know Act was enacted by Congress as the national legislation on community safety. This law is designed to help local communities protect public health, safety, and the environment from chemical hazards. To implement the act, Congress requires each state to appoint a State Emergency Response Commission. The State Emergency Response Commissions are required to divide their states into Emergency Planning Districts and to name a Local Emergency Planning Committee for each district. Broad representation by firefighters, health officials, government and media representatives, community groups, industrial facilities, and emergency managers ensures that all necessary elements of the planning process are represented.

Hazardous Materials Transportation Act

The U.S. Department of Transportation regulates hazardous materials transportation under Title 49 of the United States Code. State agencies with primary responsibility for enforcing federal and state regulations and responding to hazardous materials transportation emergencies are the California Highway Patrol and the California Department of Transportation. These agencies also govern permitting for hazardous materials transportation. Title 49 of the Code of Federal Regulations reflects laws passed by Congress as of January 2, 2006.

Occupational and Safety Health Act

Congress passed the Occupational and Safety Health Act to ensure worker and workplace safety. Its goal was to make sure employers provide their workers a place of employment free from recognized hazards to safety and health, such as exposure to toxic chemicals, excessive noise levels, mechanical dangers, heat or cold stress, or unsanitary conditions. In order to establish standards for workplace health and safety, the Occupational and Safety Health Act also created the National Institute for Occupational Safety and Health as the research institution for the Occupational Safety and Health Administration (OSHA). OSHA is a division of the U.S. Department of Labor that oversees the administration of the Occupational and Safety Health Act and enforces standards in all 50 states.

Resource Conservation and Recovery Act

The Resource Conservation and Recovery Act (RCRA) gives EPA the authority to control hazardous waste from "cradle to grave." This includes the generation, transportation, treatment, storage, and disposal of hazardous waste. RCRA also set forth a framework for the management of non-hazardous solid wastes. The 1986 amendments to RCRA enabled EPA to address environmental problems that could result from underground storage tanks (USTs) storing petroleum and other hazardous substances. The Federal Hazardous and Solid Waste Amendments are the 1984 amendments to RCRA that focused on waste minimization and phasing out land disposal of hazardous waste, as well as corrective action for releases. Some of the other mandates of this law include increased enforcement authority for EPA, more stringent hazardous waste management standards, and a comprehensive UST program.

State

Cortese List

Government Code Section 65962.5 requires that information regarding environmental impacts of hazardous substances and wastes be maintained and provided at least annually to the Secretary for Environmental Protection. Commonly referred to as the Cortese List, this information must include the following: sites impacted by hazardous wastes, public drinking water wells that contain detectable levels of contamination, USTs with unauthorized releases, solid waste disposal facilities from which there is migration of hazardous wastes, and all cease and desist and cleanup and abatement orders. This information is maintained by various agencies, including DTSC, the State Department of Health Services, State Water Resources Control Board, and the local (typically county) Certified Unified Program Agency (CUPA). However, the list is no longer centrally maintained and each of the agencies has their own databases/records; thus, the Cortese List is not just a single list.

California Occupational Safety and Health Administration

The California Occupational Safety and Health Administration (Cal/OSHA) is the primary agency responsible for worker safety in the handling and use of chemicals in the workplace. Cal/OSHA standards are generally more stringent than federal regulations. The employer is required to monitor worker exposure to listed hazardous substances and notify workers of exposure (8 Cal. Code of Regs. (CCR) section 330, et seq.). The regulations specify requirements for employee training, availability of safety equipment, accident prevention programs, and hazardous substance exposure warnings.

California Hazardous Waste Control Act

DTSC is responsible for the enforcement of the Hazardous Waste Control Act (Health and Safety Code, Section 25100, et seq.), which creates the framework under which hazardous wastes are managed in California. The law provides for the development of a state hazardous waste program that administers and implements the provisions of the federal RCRA cradle-to-grave waste management system in California. It also provides for the designation of California-only hazardous waste and development of standards that are equal to or, in some cases, more stringent than federal requirements. The Hazardous Waste Control Act lists 791 chemicals and approximately 300 common materials that may be hazardous; establishes criteria for identifying, packaging, and labeling hazardous wastes; prescribes management controls; establishes permit requirements for treatment, storage, disposal, and transportation; and identifies some wastes that cannot be disposed of in landfills.

According to Title 22 of the California Code of Regulations, substances having a characteristic of toxicity, ignitability, corrosivity, or reactivity are considered hazardous waste. Hazardous wastes are hazardous substances that no longer have a practical use, such as material that has been abandoned, discarded, spilled, or contaminated or is being stored prior to proper disposal.

Unified Hazardous Waste and Hazardous Materials Management Regulatory Program

The Unified Hazardous Waste and Hazardous Materials Management Regulatory Program was created in 1993 by Senate Bill 1082 to consolidate, coordinate, and make consistent the administrative requirements, permits, inspections, and enforcement activities of environmental and emergency management programs. The program is implemented at the local government level by CUPAs. The program consolidates, coordinates, and makes consistent the following hazardous materials and hazardous waste programs:

- Hazardous Waste Generation (including on-site treatment under Tiered Permitting)
- Aboveground Petroleum Storage Tanks (only the spill prevention control and countermeasure plan)
- USTs
- Hazardous Material Release Response Plans and Inventories
- California Accidental Release Prevention Program (CalARP)
- Uniform Fire Code Hazardous Material Management Plans and Inventories

The Los Angeles County Fire Department is the CUPA for Los Angeles County.

California Accidental Release Prevention Program

Similar to the EPA Risk Management Program, CalARP (19 CCR section 2735.1, et seq.) regulates facilities that use or store regulated substances, such as toxic or flammable chemicals, in quantities that exceed established thresholds. The overall purpose of CalARP is to prevent accidental releases of regulated substances and reduce the severity of releases that may occur. CalARP meets the requirements of the EPA Risk Management Program, which was established pursuant to the Clean Air Act Amendments.

The Accidental Release Prevention Law is implemented by the CUPA and requires that any business where the maximum quantity of a regulated substance exceeds the specified threshold quantity register with the county as a manager of regulated substances and prepare a risk management plan. A risk management plan must contain an off-site consequence analysis, a 5-year accident history, an accident prevention program, an emergency response program, and a certification of the truth and accuracy of the submitted information. Businesses submit their plans to the CUPA, which makes the plans available to emergency response personnel.

California Health and Safety Code

In California, the handling and storage of hazardous materials is regulated by Health and Safety Code section 25500, et seq. Under Health and Safety sections 25500–25543.3, facilities handling hazardous materials are required to prepare a hazardous materials business plan. Hazardous materials business plans contain basic information about the location, type, quantity, and health risks of hazardous materials stored, used, or disposed of in the state.

Health and Safety Code Chapter 6.95 establishes minimum statewide standards for hazardous materials business plans (Health and Safety Code Section 25503.5). Each business must prepare a hazardous materials business

plan if that business uses, handles, or stores a hazardous material (including hazardous waste) or an extremely hazardous material in quantities greater than or equal to the following:

- 500 pounds of a solid substance
- 55 gallons of a liquid
- 200 cubic feet of compressed gas
- A hazardous compressed gas in any amount (highly toxic with a threshold limit value of 10 parts per million or less)
- Extremely hazardous substances in threshold planning quantities

In addition, in the event that a facility stores quantities of specific acutely hazardous materials above the thresholds set forth by California code, facilities are also required to prepare an EPA Risk Management Program plan and a CalARP plan. The EPA Risk Management Program plan and CalARP plan provide information about the potential impact zone of a worst-case release and require plans and programs designed to minimize the probability of a release and mitigate potential impacts.

California Emergency Services Act

Under the Emergency Services Act (Government Code section 8550, et seq.), the State of California developed an emergency response plan to coordinate emergency services provided by federal, state, and local agencies. Rapid response to incidents involving hazardous materials or hazardous waste is an integral part of the emergency response plan, which is administered by the Governor's Office of Emergency Services. The Office of Emergency Services coordinates the responses of other agencies, including the California Environmental Protection Agency, California Highway Patrol, RWQCB, air quality management districts, and county disaster response offices.

Water Protection

The State Water Resources Control Board protects water quality in California by setting statewide policy. The State Water Resources Control Board supports the nine RWQCBs, which, within their areas of jurisdiction, protect surface and groundwater from pollutants discharged or threatened to be discharged to the waters of the state. This protection is carried out by the RWQCB through the issuance and enforcement of National Pollutant Discharge Elimination System permits, regulation of leaking USTs and contaminated properties through the Leaking Underground Storage Tank (LUST) and SLIC programs respectively. USTs are regulated under Health and Safety Code Chapter 6.7 and Title 23, Chapter 16 of the California Code of Regulations.

Local

Certified Unified Program Agency

A CUPA is a local agency that has been certified by the California Environmental Protection Agency to implement the local Unified Program. The CUPA can be a county, city, or joint powers authority.

The Los Angeles County Fire Department, Health Hazardous Materials Division is the designated CUPA for the City of Santa Clarita (City). The CUPA is the local administrative agency that coordinates the regulation of hazardous materials and hazardous wastes in the County of Los Angeles for five programs: Hazardous Waste, UST, Aboveground Petroleum Storage Tank, Hazardous Materials Disclosure/Business Emergency Plan, and CalARP.

City of Santa Clarita Santa Clarita General Plan

The following policies from the Safety Element of the City of Santa Clarita General Plan (2011) are related to hazardous materials, emergency response, and fire:

- Fire Protection Services: The Los Angeles County Fire Department provides urban and wildland fire protection services for the City, as part of the Consolidated Fire Protection District. Fire prevention activities include brush clearance compliance programs and establishing access in new subdivisions, among other activities. The Los Angeles County Fire Department has adopted wildland fire prevention programs, including incorporating the State Fire Code standards for new development in hazardous fire areas. Guidelines for fire safety measures in urban/wildland interface areas have been prepared by the California Department of Forestry and Fire Protection. These guidelines include distances for defensible space around structures.
- Emergency Response/Hazardous Materials: Station 76 in Valencia supports the Los Angeles County Fire
 Department with hazardous materials incident response.
- Emergency Preparedness: The Standard Emergency Management System has been adopted by the County of Los Angeles and the City for effective emergency response; the National Incident Management System is also used. The County of Los Angeles has adopted an Operational Area Emergency Response Plan. The City has adopted a Natural Hazard Mitigation Action Plan.
- Hazardous Waste: Hazardous waste collection for businesses are to be arranged via private waste haulers for proper disposal.

Santa Clarita Municipal Code

Pursuant to SCMC section 12.64.310, a vehicle transporting hazardous materials must be attended at all times and shall not be parked on a public roadway; near a school, bridge, or tunnel; or in a residential zone. Pursuant to SCMC section 23.30.040, hazardous materials and oils are not allowed to accumulate on the ground surface and hazardous materials and waste shall not be dumped or stored unlawfully.

4.8.3 Thresholds of Significance

The significance criteria used to evaluate the project impacts related to hazards and hazardous materials are based on Appendix G of the California Environmental Quality Act (CEQA) Guidelines. According to Appendix G of the CEQA Guidelines, a significant impact related to hazards and hazardous material would occur if the project would:

- 1. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials.
- 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.
- 3. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school.
- 4. Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as result, would it create a significant hazard to the public or the environment.
- 5. For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area.

- 6. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.
- 7. Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires.

4.8.4 Impact Analysis

The analysis of the potential hazardous materials impacts is based on information from the 2004 Phase I ESA (Appendix H) as well as an updated review of environmental databases, which is used to establish existing conditions and to identify potential environmental effects, based on the standards of significance presented in this section. Potential public safety hazards (related to airports, emergency response plans, and wildland fires) are based on the information presented in the subsections below. In determining the level of significance, the analysis assumes that the proposed project would comply with all applicable state and local ordinances and regulations (summarized in Section 4.8.2, Regulatory Framework).

Threshold HAZ-1: Would the project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

Construction of the proposed project would involve demolition, grading, and construction of new buildings and structures. Operation of the proposed facilities would involve use of hazardous chemicals such as commercially available cleaning products, landscaping chemicals and fertilizers, pool chemicals, and various other commercially available substances. The potential for the project to result in impacts under construction and operation is discussed below.

Construction

A variety of hazardous materials would be transported to, stored, and used during construction activities. These would include fuels for equipment and vehicles, new and used motor oils, cleaning solvents, paints, and storage containers and applicators containing such materials. If not transported, used, or disposed of in a safe manner, hazardous materials used during construction could represent a potential threat to the public and the environment. However, these materials would be transported, used, and disposed of in accordance with all federal, state, and local laws regulating the management and use of hazardous materials. For example, hazardous materials would not be disposed of or released onto the ground or into the underlying groundwater or any surface water during construction of the proposed project, and completely enclosed containment would be provided for all refuse generated in the planning area. Additionally, all construction waste, including trash, litter, garbage, solid waste, petroleum products, and any other potentially hazardous materials, would be removed and transported to a permitted waste facility for treatment, storage, or disposal. Use of these materials during construction for their intended purpose would not pose a significant risk to the public or the environment. Consistent with federal, state, and local requirements, transport, removal, and disposal of hazardous materials would be conducted by a permitted and licensed service provider. Any handling, transport, use, or disposal would comply with all applicable federal, state, and local agencies and regulations, including EPA, DTSC, Cal/OSHA, the California Department of Transportation, the RCRA, and the Department of Health Hazardous Materials Division of the Los Angeles County Fire Department (the CUPA for Los Angeles County).

In addition, businesses that use hazardous materials, including construction companies, are required to prepare and implement Hazardous Materials Business Plans describing procedures for the handling, transportation,

generation, and disposal of hazardous materials. As the CUPA agency, the Los Angeles Consolidated Fire Protection District would be responsible for ensuring compliance with these regulations including, without limitation, the Hazardous Waste Control Act, the Hazardous Waste Generator Program, the Hazardous Materials Release Response Plans and Inventory Program, the California Accidental Release Prevention Program, and the Aboveground Storage Tank Program

Construction activities would also include demolition of the existing structures at the north end of the site. Given the age of these structures, and consistent with the findings reported in the Phase I ESA, the presence of hazardous building materials containing asbestos or lead-based paint (LBP) are possible. However, before the Building Official issues a demolition permit, a hazardous building materials survey would be required by a licensed contractor. The identification, removal, and disposal of asbestos containing materials (ACMs) is regulated under Title 8 of the California Code of Regulations Sections 1529 and 5208. The identification, removal and disposal of LBP is regulated under 8 CCR section 1532.1. For both ACM and LBP, all work must be conducted by a State-certified professional. If ACM and/or LBP is determined to exist onsite, a site-specific hazard control plan must be prepared and submitted to the appropriate agency detailing removal methods and specific instructions for providing protective clothing and equipment for abatement personnel (South Coast Air Management District for asbestos and Cal/OSHA for lead). If necessary, a State-certified LBP and an asbestos removal contractor would be retained to conduct the appropriate abatement measures as required by the plan. Wastes from abatement and demolition activities would be disposed of at a landfill(s) licensed to accept such waste. Once all abatement measures have been implemented, the contractor would conduct a clearance examination and provide written documentation to the City that testing and abatement have been completed in accordance with all federal, state, and local laws and regulations.

Given the site conditions observed, the findings reported in the Phase I ESA, and the regulatory requirements regarding the identification and abatement of hazardous building materials, the potential for adverse effects related to demolition is minimized. As such, construction-related activities are not anticipated to create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials, and impacts would be **less than significant**. No mitigation is required.

Operations

During operations, any potential hazardous chemicals such as cleaning products, landscaping chemicals and fertilizers, pool chemicals, medical supplies, and various other commercially available substances, would be used in compliance with existing regulations and guidelines of OSHA, Cal/OSHA, the National Institute for Occupational Safety and Health, U.S. Department of Transportation, EPA, California Department of Public Health, and Los Angeles County Fire Department. The use, storage, and transport of hazardous materials and hazardous wastes is subject to all applicable federal, state, and local health and safety laws and regulations that are intended to minimize health risk to the public and the environment associated with hazardous materials. As such, the proposed project would not result in a foreseeable significant hazard to public health or the environment by routine use, transport, and disposal of hazardous chemicals. Therefore, impacts would be **less than significant**, and no mitigation is required.

Threshold HAZ-2: Would the project create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?

Construction

Construction of the proposed project would involve hazardous materials such as fuels and lubricants which would be transported to and used on site in construction vehicles and equipment. However, the potential for use of these materials to result in significant hazards to the public or the environment would be low, for the reasons described below.

The project contractor and construction crews would be required to comply with all applicable regulations governing the storage, handling, and disposal of hazardous materials and waste. As discussed in Section 4.9, Hydrology and Water Quality, the City requires preparation of a Stormwater Pollution Prevention Plan, which would be approved by and filed with the City. The Stormwater Pollution Prevention Plan would identify potential pollutant sources that may be associated with construction activity, identify non-stormwater discharges, and recommend means and methods to effectively prohibit the entry of pollutants into the public storm drain system during construction. In addition, the Stormwater Pollution Prevention Plan would include Best Management Practices (BMPs), including proper handling of petroleum products, such as proper petroleum product storage and spill response practices, to prevent pollution in stormwater discharge. The BMPs must be implemented during demolition or at the start of new construction. These BMPs would be required to remain in place until a Certificate of Occupancy for the project has been issued.

These BMPs would help control the use of hazardous substances during construction and would minimize the potential for such substances to leave the site, thus reducing the potential for the public to be exposed to construction-related chemicals and materials and reducing the potential for such substances to be released into the environment. With implementation of applicable construction BMPs and adherence to applicable hazardous materials and waste regulations, impacts involving the release of hazardous materials into the environment due to upset and accident conditions during project demolition and construction would be less than significant.

Therefore, there is a low risk of upset of hazardous materials during construction; impacts would be **less than significant**, and no mitigation is required.

Operation

During project operation, use of commercial cleaners, lubricants, or paints associated with janitorial, maintenance, and repair activities during resort operations as well as household cleaning supplies, would be relatively limited and would be subject to federal, state, and local health and safety requirements. As required by the Los Angeles Consolidated Fire Protection District (Fire Department), any business that would store hazardous materials and/or waste at its site would be required to submit business information and hazardous materials inventory forms contained in Hazardous Materials Management Plan and Hazardous Materials Business Plan. In addition, all hazardous materials handlers are subject to inspection every three years. The Fire Department, as the CUPA, requires all new commercial and other users to follow applicable regulations and guidelines regarding storage and handling of hazardous waste. All hazardous materials are required to be stored and handled according to manufacturer's directions and local, state and federal regulations including the Hazardous Waste Control Act (Health and Safety Code section 25100, et seq.), which is implemented by regulations described in CCR Title 22. As such, during operations, by adhering to existing requirements and regulations, impacts associated with reasonably foreseeable upset and accidental conditions involving the release of hazardous materials into the environment would be less than significant, and no mitigation is required.

Threshold HAZ-3: Would the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

The proposed project involves the construction and operation of a new mixed-use development. There are no schools or daycare centers located within one-quarter-mile of the project site. The nearest school or daycare facility to the project site is the Wiley Canyon Elementary School located approximately 0.35 miles north of the project site. Therefore, the project would not impact an existing or proposed school. Furthermore, regulations are in place regarding the handling of hazardous materials. Through compliance with regulations governing the use of hazardous materials, the potential to affect a school is very limited, and impacts would be **less than significant**. No mitigation is required.

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

Government Code Section 65962.5 combines several regulatory lists of sites that have the potential to pose a hazard related to known hazardous materials or substances. DTSC's EnviroStor database identifies sites that have known contamination or sites for which there may be reasons to investigate further. As discussed in Section 4.8.1, Existing Conditions, a search of selected government databases was conducted as part of the Phase I ESA (Appendix X) which was updated by a current search of the available databases (SWRCB 2022; DTSC 2022; Cal EPA 2022a; Cal EPA 2022b); County of Los Angeles Public Works 2022; and EPA 2022). Therefore, the project site itself is not included on the list of hazardous materials sites compiled pursuant to Government Code Section 65962.5. The project site was also not included on any of these databases and no cases within close proximity to the site was identified.

In addition, the project would operate in compliance with existing regulations regarding handling of hazardous materials. As such, based on review of the Phase I findings and current database review as well as compliance with existing regulations, impacts would be **less than significant**, and no mitigation is required.

Threshold HAZ-5: For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?

The nearest airport to the project site (Western Jet Aviation) is located approximately 5 miles from the project site, and the project site is not identified in any airport land use plans. As such, construction and operation of the proposed project would not pose a safety hazard for people residing or working in the project area. **No impacts** would occur.

Threshold HAZ-6: Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

This threshold addresses the potential effect of the proposed project on adopted emergency response/evacuations plans. Fire service response standards are addressed in Section 4.13, Public Services. In addition, impacts associated with the wildfire are discussed in Section 4.17, Wildfire, of this Draft EIR.

The City has identified that the terrain and layout of the Santa Clarita Valley can affect evacuation during a wildfire event, earthquake, landslide/mudslide, man-made hazard or other emergency. The City ensures that impacts to evacuation are addressed through collaboration with the Fire Department and Los Angeles County Sheriff's Office

(LASO) and through implementation of the City's General Plan, and SCMC. The City's Hazard Mitigation Plan (City of Santa Clarita 2021) outlines several mitigation actions intended to facilitate emergency evacuation, including coordinating with the Fire Department and LASO to coordinate the Public Alert and Warning Notification System, coordinating with the Fire Department to enhance emergency services to increase the efficiency of wildfire response and recovery activities, and incorporating mass notification procedures (e.g., text, social media) into evacuation notification efforts. The Hazard Mitigation Plan also includes a goal of identifying safe evacuation routes in high-risk natural disaster areas and to coordinate with Los Angeles County to identify emergency transportation routes. Within the City's General Plan Circulation Element, policies including Policy C 2.5.2 require that new development ensure adequate emergency and evacuation access is incorporated into design plans.

Los Angeles County has identified disaster routes for the City which include Interstate 5 as a primary disaster route and Lyons Avenue, located to the north of the site, as a secondary disaster route (County of Los Angeles 2022).

Construction

During project construction, temporary lane closures may be necessary on Wiley Canyon Road. Potential road closures and slower traffic during construction could interfere with emergency response activities, including evacuations. However, construction would be temporary and would affect only a small portion of identified disaster routes at any one time. Additionally, the LASO's guidance for the City's planned response to extraordinary emergency situations would continue. In addition, any interruptions to the local traffic due to construction activities would be conducted in accordance with a Traffic Management Plan as discussed further in Section 4.16, Transportation. Otherwise, there would be interference with the City's identified disaster routes on Lyons Avenue or Interstate 5 and therefore the impact to emergency access or evacuation during construction would be **less than significant**. No mitigation is required.

Operation

During project operations, it is anticipated that all project streets and area roads would remain open at all times. In addition, proposed project plans would adhere to all emergency ingress and egress requirements in accordance with building code and fire code requirements. Therefore, during operation the proposed project would not conflict with any approved emergency response or evacuation plan and impacts would be considered **less than significant**. No mitigation is required.

Threshold HAZ-7: Would the project expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires, including, where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?

The project site is located within a Very High Fire Hazard Severity Zone (VHFHSZ) in a Local Responsibility Area (LRA). As discussed in Section 3, Project Description, fire protection measures would be implemented as part of the project design to reduce the risk of wildfire hazards. Fire access would include 26-foot and 28-foot clear fire lanes throughout the site, 150-foot fire hose length in select areas, and 10- to 30-foot fire ladder access areas (see Figure 3-7, Fire Access).

Additionally, the project would implement a Conceptual Wildfire Evacuation Plan (CWEP), provided as Appendix N, and implement fuel modifications per the City requirements to reduce fire hazards around all proposed structures. The CWEP includes a quick reference guide to project staff, residents, and visitors; a graphical evacuation route map; background on how evacuations are typically conducted; and recommendations for improving project area

evacuations. The Fire Evacuation Plan also analyzes and addresses the ability for the site to serve as a temporary refuge for its staff and visitors and for a portion of the neighboring residents, including recommended ignition resistant site enhancements.

Further discussion related to the project's potential to expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires is further detailed in Section 4.17 of this Draft EIR.

As presented in Section 4.17, the project site is located within a VHFHSZ and therefore has the potential to expose people or structures to significant risk involving wildland fires. Wildland fires have historically occurred on the project site, and this could present a **potentially significant impact**.

4.8.5 Mitigation Measures

Mitigation Measure (MM) FIRE-1 through MM-FIRE-3 from Section 4.17 would reduce impacts related to hazards and hazardous materials, and specifically impacts associated with potential exposure to wildfire risks, to a less-than-significant level. The full text of these mitigation measures can be found in Section 4.17.

4.8.6 Level of Significance After Mitigation

Threshold HAZ-7: Would the project expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires, including, where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?

As stated in Section 4.17, with incorporation of MM-FIRE-1 through MM-FIRE-3, project construction would include appropriate fuel reduction and fire safety measures as part of the project design such that potentially significant impacts would be reduced to a **less-than-significant** level.

4.8.7 Cumulative Effects

Cumulative impacts related to hazards and hazardous materials would result from projects that combine to increase exposure to hazards and hazardous materials, which could result in potential impacts to the public or the environment. The potential for cumulative impacts to occur is limited since the impacts from hazards and hazardous materials are generally localized to specific sites and do not combine with one another in a way to create a greater or more severe hazard, in part due to relative infrequencies s and variances in timing and geographic location of releases. As stated above, the proposed project would result in less-than-significant impacts with compliance to local, state, and federal regulations with the exception of wildfire hazards. With implementation of Mitigation Measure (MM) FIRE-1 through FIRE-3, requires the project applicant, in consultation with the City, to develop an Emergency Vehicle Access Plan, which would reduce the impact to less than significant.

Although each related project identified in the cumulative projects list (Table 3-4) has potentially unique hazardous materials considerations, it is expected that all future development within the area will comply with federal, state, and local statutes and regulations applicable to hazardous materials and hazards. Just as with the Proposed Project, all commercial uses/businesses would be required to submit business information and hazardous materials inventory forms contained in a Hazardous Materials Management Plan and Hazardous Materials Business Plan as required by the California Department of Public Health and Los Angeles County Fire Department. The Fire Department's regulations requires all new commercial and other users to follow applicable

regulations and guidelines regarding storage and handling of hazardous waste. The Proposed Project does not include any substantive use of hazardous materials or emissions of hazardous materials such as might be associated with industrial land uses (e.g., manufacturing, chemical processing, handling of bulk quantities of hazardous materials or wastes). Given that all potential hazards and hazardous materials impacts associated with the proposed project can be reduced to a less-than-significant level, the project would not result in or contribute to cumulatively significant hazards and hazardous materials impacts. Impacts would be less than significant.

4.8.8 References Cited

- Cal EPA (California Environmental Protection Agency). 2022a. Cortese List Data Resources, Solid Waste Disposal Sites. Accessed December 6, 2022. https://calepa.ca.gov/wp-content/uploads/sites/6/2016/10/SiteCleanup-CorteseList-CurrentList.pdf.
- Cal EPA. 2022b. Cortese List Data Resources, List of Active CDO and CAO sites. Accessed December 6, 2022. https://calepa.ca.gov/wp-content/uploads/sites/6/2016/10/ SiteCleanup-CorteseList-CurrentList.pdf.
- CAL FIRE (California Department of Forestry and Fire Protection). 2020. "Sand Fire, General Information." Accessed March 2020. https://www.fire.ca.gov/incidents/2016/7/22/sand-fire/.
- City of Santa Clarita. 2021. 2021 Santa Clarita Local Hazard Mitigation Plan, October 2, 2020.
- City of Santa Clarita. 2011. City of Santa Clarita General Plan, Safety Element. Accessed June 11, 2019. https://www.codepublishing.com/CA/SantaClarita/html/SantaClaritaGP/7%20-%20Safety%20Element.pdf.
- County of Los Angeles. 2022. "Disaster Route Maps." https://dpw.lacounty.gov/dsg/DisasterRoutes/map/Santa%20Clarita.pdf, accessed December 8, 2022.
- County of Los Angeles Public Works. 2022. Online File Review for Industrial Waste, Underground Storage Tanks, and Stormwater. Accessed December 6, 2022. https://dpw.lacounty.gov/epd/CleanLA/OpenFileReview.aspx.
- DOT (United States Department of Transportation). 2022. *National Pipeline Mapping System*. Accessed December 5, 2022. https://pvnpms.phmsa.dot.gov/PublicViewer/.
- DTSC (Department of Toxic Substances Control). 2022. Envirostor Database search. Accessed December 6, 2022. https://www.envirostor.dtsc.ca.gov/public/map/?myaddress=24942+Wiley+Canyon+Road%2C+Santa+Clarita+CA.
- EPA (United States Environmental Protection Agency). 2022. National Priorities List, Cleanups in My Community, Accessed December 6, 2022. https://ordspub.epa.gov/ords/cimc/f?p=CIMC:MAP::::71:P71_ WELSEARCH:NULL%7CCleanup%7C%7C%7C%7Cfalse%

Gabriel 2004

SWRCB (State Water Resources Control Board). 2022. Geotracker Database search. Accessed December 6, 2022. https://geotracker.waterboards.ca.gov/map/?CMD=runreport&myaddress=24942+ Wiley+Canyon+Road%2C+Santa+Clarita%2C+CA.

4.9 Hydrology and Water Quality

This section describes the existing hydrology and water quality of the proposed Wiley Canyon Project (project) site, identifies associated regulatory requirements, and evaluates potential impacts related to implementation of the proposed project. The section is based in part on publicly available information from California Department of Water Resources, State Water Resources Control, and United States Geological Survey, in addition to the following:

Appendix I Hydrology Technical Memorandum, prepared by Alliance Land Planning & Engineering

dated August 29, 2023.

Appendix L Water Supply Assessment, Wiley Canyon Mixed-Use Development, June 8, 2022, prepared

by Santa Clarita Valley Water District.

4.9.1 Environmental Setting

Regional Hydrology

Regionally, the project site is located within the Santa Clara River Watershed which covers an area of approximately 1,634-square-miles. The main channel of the Santa Clara River is the last major undammed river system in Southern California. The Santa Clara River flows in a westerly direction for approximately 84 miles until finally discharging into the Pacific Ocean near the Ventura Harbor. Most precipitation in the watershed occurs between November and March, with precipitation varying significantly throughout the watershed and most strongly influenced by elevation and distance from the Pacific Ocean. The wettest areas occur along the high-relief mountain ranges on the west, north, and south sides of the watershed, while the driest areas occur in the lowlands of the Santa Clarita and Acton Basins.

The Los Angeles RWQCB Basin Plan (1994) includes water quality objectives for the entire Santa Clara River Watershed. These objectives were established to protect the various beneficial uses for that particular water body or reach. The water bodies of the Upper Santa Clara River watershed, which include streams, natural lakes and reservoirs, span a wide variety of existing, potential and/or intermittent beneficial uses. The following is a list of the beneficial uses identified in the Upper Santa Clara River Region (Kennedy/Jenks Consultants 2014):

- Municipal and Domestic Supply
- Industrial Service Supply
- Industrial Process Supply
- Agricultural Supply
- Groundwater Recharge
- Freshwater Replenishment
- Hydropower Generation
- Water Contact and Non-contact Water Recreation
- Warm and Cold Freshwater Habitat
- Wildlife Habitat
- Rare, Threatened, and Endangered Species
- Spawning, Reproduction, and/or Early Development

Site Topography and Hydrology

The project site is predominantly relatively level that gently slopes toward the north. Elevations range between approximately 1,300 and 1,325 feet above mean sea level, although there are lower elevations within the open drainage on the eastern border which consists of the South Fork of the Santa Clara River.

The South Fork Santa Clara River Watershed is further divided into the Lyon Canyon and Towsley subwatersheds. The Towsley watershed, where the project is located, drains an approximate 7,315-acre area (Appendix I-2). The South Fork of the Santa Clara River in the vicinity of the site is upstream of the confluence with Lyon Canyon. Ultimately the South Fork of the Santa Clara River joins the main channel of the Santa Clara River downstream of the project site.

Stormwater runoff at the site drains toward the northeast where it reaches the main drainage channel along the east boundary of the site (Appendix I). An existing 54-inch storm drainpipe, owned by Los Angeles County, receives flow from the site at the northeast corner and feeds into an underground box culvert that runs north below Wiley Canyon Road (Appendix I). Upstream of the culvert, is a natural section of the creek that runs parallel to Wiley Canyon Road and extends up to a second box culvert located beneath Interstate 5.

Along the westerly edge of the project site, and within the CalTrans right-of-way, there is a smaller open box channel that runs north, parallel to the freeway. This channel ends at the northwest half of the project site where runoff then sheet flows west across the project site and towards the 54-inch outlet pipe mentioned above. This smaller channel is fed by an existing 48-inch storm drainpipe which conveys flows from areas offsite, west of Interstate 5 (Appendix I).

Water Quality

The Santa Clara River currently has three adopted total maximum daily loads (TMDLs) due to non-attainment of water quality objectives, one pertaining to chloride, another pertaining to nitrogen compounds, and a third pertaining to bacteria (Kennedy/Jenks Consultants 2014). Another TMDL is in place for three lakes within the region that are impaired with trash. The project site is in the vicinity of Reach 6 of the Santa Clara River. This Reach is listed on a of impaired water bodies in accordance with the Clean Water Act, also referred to as the 303(d) List, in the Upper Santa Clara River watershed for chlorpyrifos (an insecticide), chloride, coliform bacteria, diazinon (an insecticide), and toxicity (Kennedy/Jenks Consultants 2014). Sources of chloride include self-regenerating water softeners, drinking water, and other additives that contribute to chloride in wastewater effluent. Major contributors of coliform (bacteria) to the Upper Santa Clara River are discharges from the stormwater conveyance system that drains urban areas. In contrast, runoff from natural landscapes has not been found to be a significant source of bacteria.

The State Water Resources Control Board (SWRCB) establishes statewide water quality control policy and regulation. The SWRCB also coordinates Regional Water Boards, which are responsible for designating beneficial uses, establishing water quality objectives to protect those uses, and identifying programs of implementation to meet objectives through the preparation of a basin plan. The Los Angeles Region Basin Plan for the Coastal Watersheds of Los Angeles and Ventura Counties (Basin Plan) sets forth policies that address region-wide water quality concerns. The beneficial land uses in Santa Clara River Reach 6 as set forth in the Basin Plan are identified in Table 4.9-1.

Table 4.9-1. Beneficial Use Designations for Water Bodies in the Project Area

	Water Body	
Beneficial Use	Santa Clara River Reach 6	
Municipal and Domestic Supply (MUN)	Р	
Agriculture Supply (AGR)	E	
Industrial Service Supply (IND)	E	
Industrial Process Supply (PROC)	E	
Groundwater Recharge (GWR)	Е	
Freshwater Replenishment (FRSH)	E	
Navigation (NAV)	N/A	
Hydropower Generation (POW)	N/A	
Commercial and Sport Fishing (COMM)	N/A	
Aquaculture (AQUA)	N/A	
Wildlife Habitat (WILD)	E	
Marine Habitat (MAR)	N/A	
Warm Freshwater Habitat (WARM)	E	
Cold Freshwater Habitat (COLD)	N/A	
Inland Saline Water Habitat (SAL)	N/A	
Estuarine Habitat (EST)	N/A	
Preservation of Rare and Endangered Species (RARE)	E	
Wetland Habitat (WET)	E	
Migration of Aquatic Organisms (MIGR)	N/A	
Spawning, Reproduction, and/or Early Development (SPWN)	N/A	

Source: LARWQCB 2014.

Note: N/A = not applicable; E = existing beneficial use; P = potential beneficial use)

The project site is located within the Santa Clara-Calleguas Hydrologic Unit (identification number 400.51) of the Santa Clara Watershed, as designated by the Los Angeles Regional Water Quality Control Board (RWQCB). Beneficial uses of surface waters within this subarea include industrial service and process supply, agricultural supply, groundwater recharge, water contact and non-contact recreation, freshwater replenishment, wildlife habitat, warm water fish habitat, and fish spawning habitat. Beneficial uses of groundwater include municipal and domestic water supply, industrial service and process supply, and agricultural supply (RWQCB 2014).

Groundwater

The project site is underlain by the Santa Clara River Valley East Groundwater Subbasin (East Subbasin), which is bordered on the north by the Pico Mountains, on the west by impervious rocks of the Modelo and Saugus Formations, and on the south by the Santa Susana Mountains. The East Subbasin consists of an alluvial trough bounded by granite and granodiorite of the San Gabriel Mountains to the east and southeast, the Santa Susana Mountains to the south, the Topatopa and Piru Mountains to the north and northwest, and the Sierra Pelona Mountains to the northeast. Lithologic units, from the stratigraphic top to the stratigraphic bottom, include alluvium, terrace deposits, and the Saugus Formation, which comprises the deepest freshwater-bearing formations in the Santa Clarita Valley. The Saugus Formation is underlain by various non-freshwater-bearing formations.

The South Fork of the Santa Clara River is generally surrounded by residential development. Groundwater in the East Subbasin is generally unconfined in the alluvium, but may be confined, semi-confined, or unconfined in the Saugus Formation. Developable quantities of groundwater are present in the alluvium (Alluvial Aquifer) and in portions of the Saugus Formation, and these units are underlain and laterally bounded by non-water-bearing bedrock units that do not contain significant quantities of water and cannot be developed for municipal purposes (SCVGSA 2022).

Average annual precipitation in the East Subbasin ranges from 14 inches to 16 inches. Rain falling in the upper elevations of the watershed infiltrates into the soil, where some of the water evaporates or is transpired by vegetation and the remainder becomes stormwater that can also infiltrate to groundwater. A portion of the rainfall runs off the land surface and flows into side canyons and tributaries to the river. In the urban areas, precipitation falling on impervious surfaces is directed to storm drains that flow to the river or the stormwater is directed to swales and allowed to percolate in some locations (SCVGSA 2022).

Flood Hazards

The South Fork of the Santa Clara River runs through the project site along the eastern boundary of the site. Flood zones are identified on Federal Emergency Management Agency (FEMA) Flood Insurance Rate Maps (FIRMs) as a Special Flood Hazard Areas (SFHAs) and "other areas of flood hazard." A SFHA is defined as the area that would be inundated by a flood event having a 1% chance of being equaled or exceeded in any given year. The 1% annual-chance flood is also referred to as the base flood or 100-year flood, and is the national standard used by all federal agencies for the purposes of requiring the purchase of flood insurance and regulating new development. According to FEMA FIRM mapping, the entire project site is located within areas identified as Zone A, which is a High Risk/Special Flood Hazard Area (SFHA) with no known base flood elevation, and Zone AO, a High Risk/SFHA with a base flood elevation of 3 feet as depicted on Figure 4.9-1, Flood Hazard Zones (FEMA 2022).

Dam Failure

Dam failure can result from natural or human-made causes, including earthquakes, erosion, improper dam siting or design, rapidly rising flood waters, or structural flaws. Dam failure may cause loss of life, damage to property, and displacement of persons residing in the inundation path. Within the Santa Clarita Valley, the two major reservoirs that could have a significant impact on the Santa Clarita Valley in the event of a dam failure are Castaic Lake and Bouquet Creek Reservoir. The project site is not located within the potential inundation areas associated with dam failure of either of these dams (City of Santa Clarita 2021).

4.9.2 Regulatory Framework

Federal

Clean Water Act

The Clean Water Act (CWA) (33 USC section 1251, et seq.) is intended to restore and maintain the chemical, physical, and biological integrity of the nation's waters. The CWA established basic guidelines for regulating discharges of pollutants into the waters of the United States. The CWA requires that states adopt water quality standards to protect public health, enhance the quality of water resources, and ensure implementation of the CWA.

Section 303 of the Clean Water Act (Beneficial Use and Water Quality Objectives)

The RWQCB is responsible for the protection of the beneficial uses of waters within the project area in the County. The RWQCB uses its planning, permitting, and enforcement authority to meet its responsibilities adopted in the Basin Plan for the Coastal Watersheds of Los Angeles and Ventura Counties (Basin Plan) (RWQCB 2014) to implement plans, policies, and provisions for water quality management.

In accordance with state policy for water quality control, the RWQCB employs a range of beneficial use definitions for surface waters, groundwater basins, marshes, and mudflats that serve as the basis for establishing water quality objectives and discharge conditions and prohibitions. The Basin Plan has identified existing and potential beneficial uses supported by the key surface water drainages throughout its jurisdiction (RWQCB 2014). Under CWA Section 303(d), the State of California is required to develop a list of impaired water bodies that do not meet water quality standards and objectives. A TMDL defines how much of a specific pollutant/stressor a given water body can tolerate and still meet relevant water quality standards. The RWQCB has developed TMDLs for select reaches of water bodies.

Section 401 of the Clean Water Act (Water Quality Certification)

Section 401 of the CWA requires that an applicant for any federal permit (e.g., a U.S. Army Corps of Engineers [ACOE] Section 404 permit) obtain certification from the state, requiring that discharge to waters of the United States would comply with provisions of the CWA and with state water quality standards. For example, an applicant for a permit under Section 404 of the CWA must also obtain water quality certification per Section 401 of the CWA. Section 404 of the CWA requires a permit from the ACOE prior to discharging dredged or fill material into waters of the United States, unless such a discharge is exempt from CWA Section 404. For the project area, the RWQCB must provide the water quality certification required under Section 401 of the CWA. As discussed in Section 4.3, Biological Resources, of this Environmental Impact Report, an ACOE Section 404 permit is expected to be required for the project site. Water quality certification under Section 401 of the CWA, as well as the associated requirements and terms, is required in order to minimize or eliminate the potential water quality impacts associated with the action(s) requiring a federal permit.

Section 402 of the Clean Water Act (National Pollutant Discharge Elimination System)

The CWA was amended in 1972 to provide that the discharge of pollutants to waters of the United States from any point source is unlawful unless the discharge is in compliance with an NPDES permit. The NPDES permit program, as authorized by Section 402 of the CWA, was established to control water pollution by regulating point sources that discharge pollutants into waters of the United States (33 USC section 1342). In the state of California, the U.S. Environmental Protection Agency (EPA) has authorized the State Water Resources Control Board (SWRCB) permitting authority to implement the NPDES program.

Regulations (Phase II Rule) that became final on December 8, 1999, expanded the existing NPDES Program to address stormwater discharges from construction sites that disturb land equal to or greater than 1.0 acre and less than 5.0 acres (small construction activity). The regulations also require that stormwater discharges from small municipal separate storm sewer systems (MS4s) be regulated by an NPDES General Permit for Storm Water Discharges Associated with Construction Activity, Order No. 99-08-DWQ. The Construction General Permit requires the development and implementation of a Stormwater Pollution Prevention Plan (SWPPP), which describes best management practices (BMPs) the discharger would use to protect stormwater runoff. The SWPPP must contain a visual monitoring program, a chemical monitoring program for non-visible pollutants to be implemented if there is

a failure of BMPs, and a sediment-monitoring plan if the site discharges directly to a water body listed on the 303(d) list for sediment. Routine inspection of all BMPs is required under the provisions of the Construction General Permit. On September 2, 2009, the SWRCB issued a new NPDES General Permit for Storm Water Associated with Construction Activities (Order No. 2009-0009-DWQ, NPDES No. CASO00002), which became effective July 1, 2010.

Section 404 of the Clean Water Act

Section 404 of the CWA established a permitting program to regulate the discharge of dredged or filled material into waters of the United States, which include wetlands adjacent to national waters (33 USC section 1344). This permitting program is administered by the ACOE and enforced by the EPA.

National Flood Insurance Act

The National Flood Insurance Act of 1968 established the National Flood Insurance Program in order to provide flood insurance within communities that were willing to adopt floodplain management programs to mitigate future flood losses. The act also required the identification of all floodplain areas within the United States and the establishment of flood-risk zones within those areas. FEMA is the primary agency responsible for administering programs and coordinating with communities to establish effective floodplain management standards. FEMA is responsible for preparing Flood Insurance Rate Maps that delineate the areas of known special flood hazards and their risk applicable to the community. The program encourages the adoption and enforcement by local communities of floodplain management ordinances that reduce flood risks. In support of the program, FEMA identifies flood hazard areas throughout the United States on FEMA flood hazard boundary maps.

Executive Order 11988

Under Executive Order 11988 – Floodplain Management, the FEMA is responsible for management of floodplain areas defined as the lowland and relatively flat areas adjoining inland and coastal waters subject to a one percent or greater chance of flooding in any given year (the 100-year floodplain). FEMA requires that local governments covered by federal flood insurance pass and enforce a floodplain management ordinance that specifies minimum requirements for any construction within the 100-year floodplain. The Order addresses floodplain issues related to public safety, conservation, and economics. It generally requires federal agencies constructing, permitting, or funding a project in a floodplain to avoid incompatible floodplain development, be consistent with the standards and criteria of the National Flood Insurance Program, and restore and preserve natural and beneficial floodplain values.

State

Port-Cologne Water Quality Control Act

The Porter-Cologne Act of 1967 (Water Code section 13000, et seq.) is the basic water quality control law for California. This act requires the SWRCB and the nine RWQCBs to adopt water quality criteria to protect state waters. The SWRCB establishes statewide policy for water quality control and provides oversight of the RWQCBs' operations. In addition to other regulatory responsibilities, the RWQCBs have the authority to conduct, order, and oversee investigation and cleanup where discharges or threatened discharges of waste to waters of the state could cause pollution or nuisance, including impacts to public health and the environment. The criteria for the proposed project area are contained in the Los Angeles Basin Plan, adopted by the RWQCB on September 11, 2014 (RWQCB 2014). Additionally, the following regulatory tools are unique to the Porter-Cologne Act.

Dredge/Fill Activities and Waste Discharge Requirements. Actions that involve, or are expected to involve, discharge of waste are subject to water quality certification under Section 401 of the CWA (e.g., if a federal permit is being sought or granted) and/or waste discharge requirements (WDRs) under the Porter-Cologne Act. Chapter 4, Article 4, of the Porter-Cologne Act (Water Code sections 13260–13274) states that persons discharging or proposing to discharge waste that could affect the quality of waters of the state (other than into a community sewer system) must file a Report of Waste Discharge with the applicable RWQCB. For discharges directly to surface water (waters of the United States), an NPDES permit is required, which is issued under both state and federal law. For other types of discharges, such as waste discharges to land (e.g., spoils disposal and storage), erosion from soil disturbance, or discharges to waters of the state (such as isolated wetlands), WDRs are required and are issued exclusively under state law. WDRs typically require many of the same BMPs and pollution control technologies as required by NPDES-derived permits. Further, the WDRs application process is generally the same as for CWA Section 401 water quality certification, though in this case it does not matter whether the particular project is subject to federal regulation.

National Pollution Discharge Elimination System Permits

In California, the SWRCB and its RWQCBs administer the National Pollution Discharge Elimination System (NPDES) permit program. The NPDES permit system was established in the CWA to regulate both point source discharges and nonpoint source discharges to surface waters of the United States. The NPDES program consists of characterizing receiving water quality, identifying harmful constituents, targeting potential sources of pollutants, and implementing a comprehensive stormwater management program. Construction and industrial activities are typically regulated under statewide general permits that are issued by the SWRCB. The RWQCB also issues WDRs that serve as NPDES permits under the authority delegated to the RWQCBs under the CWA. In November 1990, under Phase I of the urban runoff management strategy, the EPA published NPDES permit application requirements for municipal, industrial, and construction stormwater discharges. With regard to municipalities, the permit application requirements were directed at jurisdictions owning or operating MS4s serving populations of 100,000 or more, or contributing significant pollutants to waters of the United States.

Trash Amendments

On April 7, 2015, the SWRCB adopted an Amendment to the Water Quality Control Plan for Ocean Waters of California (Ocean Plan) to Control Trash and Part 1, Trash Provision of the Water Quality Control Plan for Inland Surface Waters, Enclosed Bays, and Estuaries. The SWRCB's objective with Trash Amendments is to provide statewide consistency for the SWRCB's regulatory approach to reduce environmental issues associated with trash in state waters, while focusing limited resources on high trash generating areas.

The Trash Amendments prohibit the discharge of trash to surface waters of the state, or the deposition of trash where it may be discharged into surface waters of the state, and require systems to control mobilization and discharge of trash from areas with high trash generation rates (called "priority land uses"). The Trash Amendments provide a compliance schedule for retrofit of existing developed areas that discharge to municipal MS4s. The Trash Amendments will be implemented through revision of MS4 and other NPDES permits in the future.

California Water Code

The California Water Code includes 22 kinds of districts or local agencies with specific statutory provisions to manage surface water. Many of these agencies have statutory authority to exercise some forms of groundwater management. For example, a Water Replenishment District (Water Code section 60000, et seq.) is authorized to

establish groundwater replenishment programs and collect fees for that service, while a Water Conservation District (Water Code section 75500, et seq.) can levy groundwater extraction fees. Through special acts of the legislature, 13 local agencies have been granted greater authority to manage groundwater. Most of these agencies, formed since 1980, have the authority to limit export and even control some in-basin extraction upon evidence of overdraft or the threat of an overdraft condition. These agencies can also generally levy fees for groundwater management activities and for water supply replenishment.

Sustainable Groundwater Management Act

On September 16, 2014, Governor Jerry Brown signed into law a three-bill legislative package—Assembly Bill 1739, Senate Bill 1168, and Senate Bill 1319—collectively known as the Sustainable Groundwater Management Act (SGMA). SGMA requires governments and water agencies of high- and medium-priority basins to halt overdraft and bring groundwater basins into balanced levels of pumping and recharge. Under SGMA, these basins should reach sustainability within 20 years of implementing their sustainability plans. For critically over-drafted basins, sustainability should be achieved by 2040. For the remaining high- and medium-priority basins, 2042 is the deadline. Through SGMA, the California Department of Water Resources provides ongoing support to local agencies through guidance, financial assistance, and technical assistance. SGMA empowers local agencies to form Groundwater Sustainability Agencies to manage basins sustainably and requires those Groundwater Sustainability Agencies to adopt Groundwater Sustainability Plans (GSPs) for crucial (i.e., medium- to high-priority) groundwater basins in California.

The Santa Clara River Valley East Groundwater Basin is considered a high-priority basin with respect to SGMA (California Department of Water Resources 2019). The passage of SGMA in 2014 required replacing the Castaic Lake Water Agency (CLWA) Groundwater Management Plan with the Santa Clara River Valley East Groundwater Subbasin Groundwater Sustainability Plan (SCVGSA 2022). The Santa Clara River Valley East Groundwater Subbasin Groundwater Sustainability Plan was adopted January 2022, in accordance with the SGMA (SCVGSA 2022).

Local

Flood Control Regulations

Both the City and County have adopted floodplain management ordinances to implement the National Flood Insurance Program and other federal requirements established by FEMA. In August 2008, the City adopted Floodplain Management regulations (SCMC Chapter 10.06). The Floodplain Management regulations is based on the California Model Floodplain Management Ordinance, issued by the California Department of Water Resources, which administers the National Floodplain Insurance Program for FEMA. The City's Floodplain Management regulations establishes floodway maps, governs land uses and construction of structures within floodplains, and establishes water surface elevations. Drainage requirements are also addressed in other portions of the SCMC, in order to ensure that stormwater flows are directed away from buildings into drainage devices to prevent flooding.

Upper Santa Clara River Watershed Integrated Regional Water Management Plan

The Upper Santa Clara River Watershed Integrated Regional Water Management Plan examines current and future water related needs, identifies regional objectives for water related resource management, develops strategies to address identified needs, and then evaluates and offers various projects to meet the regional objectives. The purpose of this plan is to integrate planning and implementation efforts and facilitate regional cooperation, with

the goals of reducing water demands, improving operational efficiency, increasing water supply, improving water quality, and promoting resource stewardship over the long term. The Integrated Regional Water Management Plan process is an open forum for stakeholders to engage on water related issues, including input on related planning efforts like the Urban Water Management Plan, Salt and Nutrient Management Plan, Enhanced Watershed Management Plan, Stormwater Resources Plan, and SGMA. The Integrated Regional Water Management Plan includes plan performance and monitoring requirements to ensure compliance with the plan.

Los Angeles County Low Impact Development Manual

The County prepared the 2014 Low Impact Development (LID) Standards Manual (LACDPW 2014) to comply with the requirements of the NPDES MS4 Permit for stormwater and non-stormwater discharges from the MS4, within the coastal watersheds of Los Angeles County (CASO04001, Order No. R4-2012-0175). The LID Standards Manual also fulfills the LID Standards of SCMC Chapter 17.95.

This permit covers 84 cities and the unincorporated areas of Los Angeles County. Under the Permit, the Los Angeles County Flood Control District is designated as the Principal Permittee and the County, along with 84 incorporated cities, are designated as Permittees. In compliance with the Permit, the Permittees have implemented a stormwater quality management program, with the ultimate goal of accomplishing the requirements of the Permit and reducing the amount of pollutants in stormwater and urban runoff, wherein new development/redevelopment projects are required to prepare a LID report.

The County LID Standards Manual provides guidance for the implementation of stormwater quality control measures in new development and redevelopment projects in unincorporated areas of the County, with the intention of improving water quality and mitigating potential water quality impacts from stormwater and non-stormwater discharges. The LID Standards Manual addresses the following objectives and goals (LACDPW 2014):

- Lessen the adverse impacts of stormwater runoff from development and urban runoff on natural drainage systems, receiving waters, and other water bodies;
- Minimize pollutant loadings from impervious surfaces by requiring development projects to incorporate properly-designed, technically-appropriate BMPs and other LID strategies; and
- Minimize erosion and other hydrologic impacts on natural drainage systems by requiring development projects to incorporate properly-designed, technically-appropriate hydromodification control development and technologies.

The LID Standards Manual requires that projects prioritize the selection of BMPs to retain 100% of the design storm on site through infiltration, evapotranspiration, stormwater runoff harvest and use, or a combination thereof, unless it is demonstrated that it is technically infeasible to do so. Projects that are unable to fully retain the design storm on site through retention-based stormwater quality control measures must implement alternative compliance measures, such as on-site biofiltration, off-site groundwater replenishment, off-site infiltration and/or bioretention, and off-site retrofit. Prior to off-site mitigation, the portion of the design storm that cannot be reliably retained on site must be treated to meet effluent quality standards.

City Standard Urban Stormwater Mitigation Plan

SCMC Chapter 17.95 implements the current MS4 Permit requirements. The regulations aim to reduce the water quality impacts of development by using smart growth practices and integrating LID principles to mimic predevelopment hydrology through infiltration, evapotranspiration and rainfall harvest, and reuse. The City has

adopted by reference previously adopted Standard Urban Stormwater Mitigation Plan requirements and the County LID Standards Manual.

SCMC Chapter 17.95 applies to the following:

- Development projects 1 acre or larger that add more than 10,000 square feet of impervious surface area
- Redevelopment projects that create more than 5,000 square feet of impervious surfaces (10,000 square feet if a single-family home)

SCMC Chapter 17.95 requirements include the following:

- New development shall not increase the peak rate of discharge of stormwater from the developed site if this increase would increase the probability of downstream erosion.
- Subdivisions must:
 - Concentrate or cluster new development on portions of the site while leaving the remaining land in a natural undisturbed condition;
 - Limit clearing and grading of native vegetation to the minimum extent practicable, consistent with the construction of lots and to allow access and provide fire protection; and
 - Preserve riparian areas and wetlands.
- Projects must be designed to control pollutants, pollutant loads, and runoff volume to the maximum extent
 feasible, by minimizing impervious surfaces through infiltration, evapotranspiration, bioretention and/or
 rainfall harvest, and reuse.

To meet these standards, applicable development projects must retain the Stormwater Quality Design Volume on site. The Stormwater Quality Design Volume is defined as the runoff from either of the following, whichever is greater:

- The 85th percentile, 24-hour runoff, as determined from the Los Angeles County 85th percentile precipitation isohyetal (contour of equal precipitation).
- The volume of runoff produced from a 0.75-inch, 24-hour rain event

In addition, large-scale projects are required to manage the difference between the Stormwater Quality Design Volume pre- and post-construction, through on-site retention.

Landscape and Irrigation Standards

Water efficient landscape requirements, set forth in SCMC Chapter 17.51, which apply to new and redevelopment projects, include the following:

- Plant materials emphasize drought-tolerant and/or native species
- Turf areas shall not exceed 50% or 20% of the total landscaped area for single-family and multi-family development, respectively

Santa Clara River Valley East Subbasin Groundwater Management Plan

In 2001, as part of legislation authorizing Castaic Lake Water Agency (CLWA) to provide retail water service in addition to its ongoing wholesale supply, California Assembly Bill (AB) 134 included a requirement for the preparation of a groundwater management plan (GWMP). Adopted in 2003, the GWMP for the Santa Clarita Valley Groundwater Basin for the East Subbasin formalized a number of existing water supply and water resource planning and management activities in the now-Santa Clarita Valley (SCV) Water service area. The GWMP was replaced in January 2022 by the Santa Clara River Valley East Groundwater Subbasin Groundwater Sustainability Plan (GSP), which was prepared in accordance with SGMA requirements (SCVGSA 2022). The GSP provides information about the Basin setting, the quantitative methods and sustainable management criteria for evaluating the health (sustainability) of the Basin, the monitoring networks, projects and management actions to achieve sustainability, and the implementation plan for the GSP (SCVGSA 2022). The GSP includes a description of the groundwater conditions, including groundwater levels and flow directions, changes in storage, the potential for seawater intrusion or land subsidence, locations where surface water and groundwater are interconnected, the identification and distribution of groundwater-dependent ecosystems, and a discussion of groundwater quality for drinking water and agricultural irrigation (SCVGSA 2022). The GSP presents the historical, current, and projected future water budgets for the Basin, including quantification of the estimated change in storage, as well as a description of the monitoring programs for groundwater levels, storage, water quality, land subsidence, and interconnected surface water (SCVGSA 2022). The GSP provides the sustainability goal for the Basin, describes the process through which sustainable management criteria were established and how they pertain to chronic lowering of groundwater levels, reduction in groundwater storage, seawater intrusion, degraded water quality, land subsidence, and depletion of interconnected surface water (SCVGSA 2022).

4.9.3 Thresholds of Significance

The significance criteria used to evaluate the project impacts to hydrology and water quality are based on Appendix G of the California Environmental Quality Act (CEQA) Guidelines. According to Appendix G of the CEQA Guidelines, a significant impact related to hydrology and water quality would occur if the project would:

- 1. Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality.
- 2. Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin.
- 3. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:
 - i. Result in substantial erosion or siltation on- or off-site.
 - ii. Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site.
 - 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.
- 4. In a flood hazard, tsunami, or seiches zones, risk release of pollutants due to project inundation.
- 5. Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan.

4.9.4 Impact Analysis

Threshold HYD-1: Would the project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?

Construction

Project construction would include substantial grading and earthwork activities that could expose soils to potential erosion and siltation that could be transported offsite if not managed appropriately. Grading would be followed by vertical building construction, paving/concrete, and landscape installation. In addition, use of heavy equipment and other activities during the construction phase of the project, could include use and storage of fuels, oils and lubricants, solvents and cleaners, cements and adhesives, paints and thinners, degreasers, cement and concrete, and asphalt mixtures, that could become potential pollutant sources. All of these construction-related activities could adversely affect water quality of the nearby South Fork of the Santa Clara River, and downstream Santa Clara River.

However, construction activities must comply with the SWRCB regulations which require preparation and implementation of a SWPPP, in accordance with the NPDES Construction General Permit. Additionally, the County Code Appendix J-Grading also requires preparation of a site-specific SWPPP and Erosion and Sediment Control Plan (ESCP), which would be prepared prior to earthwork activities and would be implemented during project construction. The ESCP must include BMPs to address transport of sediment and protect properties from erosion, flooding, or the deposition of mud, debris, or construction-related pollutants. The SWPPP must include BMPs, including erosion control measures and proper handling of petroleum products, such as proper petroleum product storage and spill response practices, to prevent pollution in stormwater discharge. The construction-phase BMPs would assure effective control of not only sediment discharge, but also of pollutants associated with sediments, such as nutrients, heavy metals, and pesticides. The SWPPP would be subject to review and approval by the County for compliance with the Public Works' Construction Site Best Management Practices Manual (LACDPW 2010). Additionally, all project construction activities are required to comply with the Public Works grading permit regulations, which require the implementation of grading and dust control measures, including a wet weather erosion control plan if construction occurs during the rainy season, as well as inspections to ensure that sedimentation and erosion is minimized. Through compliance with these existing regulations, the Project would not result in any significant water quality impacts related to soil erosion during the construction phase.

Typical BMPs that could be incorporated into the SWPPP include the following:

- Diverting off-site runoff away from the construction site
- Vegetating landscaped/vegetated swale areas as soon as feasible following grading activities
- Placing perimeter straw wattles to prevent off-site transport of sediment
- Using drop inlet protection (filters and sand bags or straw wattles), with sandbag check dams within paved areas
- Regular watering of exposed soils to control dust during demolition and construction
- Implementing specifications for demolition/construction waste handling and disposal
- Maintaining erosion and sedimentation control measures throughout the construction period
- Stabilizing construction entrances to avoid trucks from imprinting soil and debris onto City roadways
- Training, including for subcontractors, on general site housekeeping

- Using contained equipment wash-out and vehicle maintenance areas
- Providing educational materials on oil disposal and recycling programs
- Implementing spill control at fueling facilities

The construction-phase BMPs would assure effective control of not only sediment discharge, but also of pollutants associated with sediments, such as nutrients, heavy metals, and certain pesticides, including legacy pesticides. The SWPPP would be subject to review and approval by the City for compliance with the Los Angeles County Public Works Construction Site Best Management Practices Manual (LACDPW 2010). Additionally, all project construction activities are required to comply with the City's Engineering Services Division grading permit regulations, which require the implementation of grading and dust control measures, including a wet weather erosion control plan if construction occurs during the rainy season, as well as inspections to ensure that sedimentation and erosion is minimized.

In addition, construction activities must also comply with SCAQMD Rule 403 – Fugitive Dust, which would also be effective in minimizing the potential for wind and water erosion at the site.

Through compliance with these existing regulations, the project would not result in any significant water quality impacts related to soil erosion during the construction phase. Impacts would be **less than significant**, and no mitigation is required.

Operation

The project site is largely undeveloped and once constructed, the site would have a substantial increase in new impervious surfaces. This increase in impervious surfaces would result in increased stormwater runoff volumes and rates, as well as potential impairment of water quality runoff. The major sources of pollution in stormwater runoff would be contaminants such as oil, grease, organics, pesticides, trash, and debris that accumulate on rooftops and other impervious surfaces, such as parking lots, driveways, and pedestrian walkways.

Contaminants that may be present in runoff derived from landscaped areas include nitrogen and phosphorous from fertilizers. Excess fertilizers can impact water quality by promoting excessive and/or rapid growth of aquatic vegetation, which reduces water clarity and results in oxygen depletion. Pesticides can also enter urban runoff after application on landscaped areas and can be toxic to aquatic organisms and can bioaccumulate in larger species, such as birds and fish. Oil and grease can enter dry-weather and stormwater runoff from vehicle leaks, traffic, and maintenance activities. Metals can enter runoff as surfaces corrode, decay, or leach. Potential gross pollutants associated with operational activities include clippings associated with landscape maintenance, street litter, and pathogens (bacteria).

During operations, the project site would consist of vegetated open space, landscaped areas, buildings, and hardscapes. All stormwater flows would be directed to storm drain features (e.g., catch basins, grated inlets, and area drains) and water quality/detention basins (i.e., two separate above ground biofiltration basins), resulting in no contact with bare soil surfaces subject to erosion and associated siltation of the South Fork Santa Clara River or downstream main stem of the Santa Clara River.

Proposed improvements include constructing three drainage detention basins: a 30,011-square-foot (0.69-acre) drainage basin located immediately south of the multifamily apartment buildings (Lot 4), a 7,762 square-foot (0.18-acre) water quality/detention basin located directly north of the parking area for the proposed memory care, and a 6,344 square-foot (0.15 acre) water quality/detention basin, located in the eastern portion of the project site south

of the proposed pool. These basins would be sized to meet City drainage control requirements such that they would have sufficient capacity to treat 1.5-times the design volume generated on-site, based on the 85th percentile rainfall, which would ensure adequate treatment capacity in accordance with the County's LID Manual requirements as required by the City. For example, the biofiltration basin located north of the proposed memory care facility would have a treatment capacity of 67,613 cubic feet when the required size for that subdrainage area would be 66,148 cubic feet (Appendix I). The biofiltration basin located in the eastern portion of the project site would provide a treatment volume of 22,056 cubic feet with a required minimum volume of 17,084 cubic feet (Appendix I). As a result, with adherence to drainage control requirements, water quality impacts during project operations would be less than significant, and no mitigation is required.

Threshold HYD-2: Would the project substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?

Water supply for the proposed project water supply would be provided by Santa Clarita Valley Water Agency (SCV Water) which generally meets its potable water demands using a mix of local groundwater, banked groundwater supplies, imported State Water Project (SWP) water and other imported supplies. In addition, recycled water is delivered to some customers for non-potable uses, such as landscape irrigation. From the period of 2016 to 2020, groundwater supplies represented between 36 and 56% of the total municipal supply (Appendix L). The groundwater basin in the Santa Clarita Valley region, the East Groundwater Subbasin, is unadjudicated, meaning that SCV Water does not have specific adjudicated, or defined, water rights or specific limitations that dictate its water supply (Appendix L). However, in practice, SCV Water assesses available groundwater supplies pursuant to appropriative groundwater rights in the basin and in accordance with a groundwater operating plan developed by SCV Water and other retail water purveyors in the Santa Clarita Valley and complemented by analyses based on a numerical groundwater flow model of the basin. SCV Water is also a member of the Santa Clarita Valley Groundwater Sustainability Agency (SCV-GSA) for the Santa Clara River East Subbasin. In preparing the basin's Groundwater Sustainability Plan (GSP) pursuant to SGMA requirements, it conducted additional numeric modeling that further refined the groundwater operating plan for the basin and establishing a pathway toward sustainability.

Water supply in the East Groundwater Subbasin is obtained from two different aquifers, the Alluvial Aquifer and the Saugus Formation. Based on a combination of historical operating experience and groundwater modeling analyses, the Alluvial Aquifer can supply groundwater on a long-term sustainable basis in the overall range of 30,000 to 40,000 acre-feet per year (AFY), with a probable reduction in dry years to a range of 30,000 to 35,000 AFY (Appendix L). Pumping from the Saugus Formation in a given year is tied directly to the availability of other water supplies, particularly from the SWP. During average-year conditions within the SWP system, Saugus pumping ranges between 7,500 and 15,000 AFY. Planned dry-year pumping from the Saugus Formation ranges between 15,000 and 25,000 AFY during a drought year and can increase to between 21,000 and 25,000 AFY if SWP deliveries are reduced for two consecutive years and between 21,000 and 35,000 AFY if SWP deliveries are reducedfor three consecutive years in accordance with the updated groundwater operating plan and the GSP (Appendix L). Such high pumping would be followed by periods of reduced (average-year) pumping, at rates between 7,500 and 15,000 AFY, to further enhance the effectiveness of natural recharge processes that would recover water levels and groundwater storage volumes after the higher pumping during years with low SWP allocations.

According to the Water Supply Assessment (WSA) provided by SCV Water for the project, using SCV's water demand factors, the total estimated water demand for the project at full buildout would be approximately 117 AFY in an average/normal year (Appendix L). The demand would increase to 124 AFY in a single dry year and to 119 AFY in multiple dry years (Appendix L). The available water supplies and demands for SCV Water's service area were analyzed in the 2020 UWMP to assess the region's ability to satisfy demands during the following variable periods:

(1) an average water year; (2) single-dry year; and (3) multiple-dry years, which included an assessment of a five-year dry period. According to that analysis, supply and demand comparisons demonstrated that existing and planned supplies are available to meet existing and project demands under all such conditions for the planning period up through 2050 (Appendix L). While the variances in SWP supplies can have a large effect on overall supply reliability, SCV Water has numerous alternatives including accounts in the Semitropic Groundwater Storage Program, groundwater banking and exchange programs, storage accounts in Castaic Lake, and participation in DWR's dry-year water purchase program continue to meet demands (Appendix L).

According to projections for normal, single dry year, and multiple dry-year demands compared with projected supplies, SCV Water would be able to meet the project's water demands in addition to existing and projected demands out to 2050 (Appendix L).

In addition, although construction of buildings and hardscapes during project development would result in a decrease in pervious surfaces compared to existing conditions, however, as noted above, the proposed improvements include construction of 3 drainage detention basins that would provide an ability for the majority of runoff to infiltrate onsite.

As a result, the project would not substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project would impede sustainable groundwater management of the basin. Impacts would be **less than significant**, and no mitigation is required.

Threshold HYD-3: Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or through the addition of impervious surfaces, in a manner which would:

i. Result in substantial erosion or siltation on- or off-site?

The project site currently is predominantly undeveloped and infiltrates onsite or drains mostly northwest toward the South Fork of Santa Clara River. Development associated with the project would introduce new impervious surfaces over much of the project site and alter the existing drainage patterns. If not managed appropriately, stormwater runoff from these hardscapes could potentially result in erosion or siltation on-or off-site.

As previously discussed, the three water quality/detention basins would be constructed as part of the project, in order to enhance water quality and reduce stormwater runoff flow rates and volumes. Runoff from the site would collected in a series of catch basins and storm drain lines and directed to one of these detention basins for onsite infiltration in accordance with regulatory requirements including the County's LID Manual standards consistent with the NPDES MS4 permit. The detention basins would include a low flow orifice to control water levels in the basin which would drain onsite through a subterranean perforated pipe.

Additionally, along the banks of the South Fork of the Santa Clara River within the project site, the project proposes soil cement bank protection improvements, adjacent to the asphalt trail and maintenance road, for protection during a 25-year storm event.

Therefore, with implementation of the proposed drainage control measures including the catch basins, detention basins and bank protection features, consistent with local stormwater requirements, the

proposed changes to drainage patterns would result in substantial erosion or siltation on- or off-site. As a result, impacts would be **less than significant**, and no mitigation is required.

ii. Substantially increase the rate or amount of surface runoff in a manner which would result in flooding onor off-site?

The proposed project includes drainage control features as part of proposed improvements including three water quality/detention basins which would be constructed as part of the project, in order to not only enhance water quality but also reduce stormwater runoff flow rates and volumes. The detention basins would be sized in accordance with the County's LID Manual and City requirements to ensure adequate capacity for most peak storm flows consistent with the NPDES MS4 requirements. Water levels would be controlled by low flow orifices for any overflow into a perforated subterranean drain line that would still keep flows onsite. As per the LID Standards Manual, the project's BMPs would retain 100% of the design storm on site through a combination of infiltration and evapotranspiration. The detention basin proposed for the south end of the site (Lot 4), adjacent to the natural creek segment of the drainage, would be located upstream of the project site's discharge location at the 54-inch diameter outlet, would syphon off a volume of runoff from the creek that is equal to the calculated runoff volume that the developed condition of the project would produce. As a result, the net change to discharges to the drainage channel would remain at zero (Appendix I).

Therefore, the proposed detention basins would accommodate proposed project-related increases in stormwater flow such that off-site flooding would not occur. In addition, on-site drainage improvements would be designed to accommodate on-site stormwater flow, such that on- or off-site flooding would not occur. As a result, impacts would be **less than significant**, and no mitigation is required.

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?

The proposed detention basin volumes would be sized in accordance with the City's drainage control requirements which meet MS4 permit requirements for stormwater volumes. As such, the proposed detention basins would accommodate proposed project-related increases in stormwater flow such that the capacity of existing or planned stormwater drainage systems would not be exceeded. In addition, on-site drainage improvements would be designed to accommodate on-site stormwater flow consistent with City requirements. The detention basins including the low flow orifices to perforated drainage lines would enhance downward percolation of runoff and associated groundwater recharge, while naturally filtering out residual concentrations of pollutants in stormwater. As a result, impacts would be **less than significant**, and no mitigation is required.

iv. Impede or redirect flood flows?

Based on the FEMA FIRM maps for the project site, the entire project site is located in an area mapped as either Zone A, Special Flood Hazard Area (without base flood elevation) or Zone AO, SFHA (with base flood elevation of 3 feet), as shown in Figure 4.9-1. SFHA, also referred to as the base flood or 100-year flood zone, are defined as the area that will be inundated by the flood event having a 1% chance of being equaled or exceeded in any given year. Placement of the proposed improvements would impede and potentially redirect flood flows if not addressed appropriately.

However, Los Angeles County is a participating jurisdiction in the NFIP and, therefore, all new development must comply with the minimum requirements of the NFIP. The project would have to implement physical measures that affect the hydrologic or hydraulic characteristics such that proposed improvements are out of the flood hazard zones. Once modified, either through grading and/or other hydraulic changes such as bank improvements to the South Fork of the Santa Clara River, the proponents would be required to obtain a Letter of Map Revision (LOMR) from FEMA to revise the current flood maps. A LOMR officially revises the FIRM or Flood Boundary and Floodway Map, and sometimes the Flood Insurance Study report, and when appropriate, includes a description of the modifications. Once a complete LOMR application is submitted, FEMA has 90 days to review the application and issue the LOMR. Implementation of mitigation measure MM-HYD-1, which requires that design plans including the site modifications meet FEMA requirements to remove the site from the SFHA, and meet NFIP requirements, is required. As a result, impacts would be potentially significant. However, with implementation of MM-HYD-1, impacts would be less than significant with mitigation.

Threshold HYD-4: In a flood hazard, tsunami, or seiches zones, would the project risk release of pollutants due to project inundation?

The project site is located inland and not susceptible to tsunami hazards nor is there an enclosed or semi-enclosed body of water such that there would be any risk of seiche hazards. However, as discussed above in Threshold HYD-3.iv, the project site is located within a SFHA. Any unprotected storage of hazardous materials could be at risk of release in the event of flooding. As also discussed in Threshold HYD-3.iv, the proposed project would include modifications to hydrology and hydraulics as required by MM-HYD-1, sufficient to obtain a LOMR from FEMA whereby the flood hazard zone designation would be removed and the risk flooding reduced to become less than significant. The proposed land uses do not include any bulk storage of hazardous materials and would be required to adhere to applicable regulatory requirements for any that are.

Within the Santa Clarita Valley, the two major reservoirs that could have a significant impact on the Santa Clarita Valley in the event of a dam failure are Castaic Lake and Bouquet Creek Reservoir. The project site is not located within the potential inundation areas associated with dam failure of either of these dams.

Therefore, considering the reduction in risk of flooding as a result of the required LOMR from hydrologic and hydraulic modifications that would be required for the project, combined with regulatory adherence for any storage, use, or disposal of hazardous materials, the potentially significant impacts related to risk of release of pollutants due to project inundation would be reduced to less than significant with implementation of mitigation.

Threshold HYD-5 Would the project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

Water Quality Control Plan

In addition to surface water quality impacts, as previously described, groundwater quality could be potentially affected by infiltration of urban runoff from the project site. Identification of the groundwater pollutants of concern for the project was based on consideration of proposed land uses, as well as pollutants that have the potential to impair beneficial uses of groundwater beneath the site. The Basin Plan (RWQCB 2014) contains numerical objectives for designated groundwater basins, such as the Santa Clara River Valley East Groundwater Basin, for bacteria, mineral quality, nitrogen, and various toxic chemical compounds, and contains qualitative objectives for

taste and odor. Beneficial uses of groundwater downstream of the project site include municipal and domestic water supply, industrial service and process supply, and agricultural supply.

Proposed LID water quality/retention basins, in combination with required drainage control requirements, would be protective of water quality that is consistent with Basin Plan policies and water quality objectives. Therefore, potential pollutants in stormwater runoff during construction and operation would not conflict with or obstruct implementation of a water quality control plan. Impacts would be **less than significant**, and no mitigation is required.

Groundwater Management Plan

Passage of SGMA in 2014 requires replacing the CLWA Groundwater Management Plan with a requirement implement a GSP that provides a pathway to sustainability. As discussed for Threshold HYD-2, based on the CLWA 2020 Urban Water Management Plan, the groundwater component of overall water supply in the Upper Santa Clara River Valley was derived from the CLWA Groundwater Management Plan. This plan was developed and analyzed to meet water requirements (municipal, agricultural, small domestic) while maintaining the Santa Clara River Valley East Groundwater Basin in a sustainable condition (i.e., no long-term depletion of groundwater or interrelated surface water).

In terms of adequacy and availability, the combined active Alluvial Aquifer groundwater source capacity of municipal wells (approximately 67,000 AFY) is more than sufficient to meet the current and potential future (i.e., through 2050) municipal, or urban, component of groundwater supply from the alluvium, while remaining within the 30,000 to 40,000 AFY basin yield. Therefore, the proposed project would not conflict with or obstruct implementation of a sustainable groundwater management plan. Impacts would be **less than significant**, and no mitigation is required.

4.9.5 Mitigation Measures

MM-HYD-1

The applicant must submit an application for a Letter of Map Revision (LOMR) from the Federal Emergency Management Agency (FEMA) along with a hydrology and hydraulics report prepared by a California licensed engineer. The LOMR must be based on the implementation of all physical measures that affect the hydrologic or hydraulic characteristics of the flooding source for the site that are to be included as part of the project before obtaining a building permit. The hydrologic and hydraulics report must demonstrate how modification of the existing regulatory floodway or the Special Flood Hazard Area for the project site will reduce flooding risks to within FEMA requirements. Once the LOMR is approved by FEMA and revises the Flood Insurance Rates Map or Flood Boundary and Floodway Map for the project site, construction of the proposed project may commence in accordance with applicable law.

4.9.6 Level of Significance After Mitigation

With all modifications to site grading and/or bank protection measures implemented as approved by FEMA and the City, the project site would be located outside of a SFHA such that flooding impacts would be reduced to less than significant levels.

4.9.7 Cumulative Effects

The geographic context for the analysis of cumulative impacts associated with water quality is the encompassing Santa Clara River Watershed. Cumulative development in the Santa Clara River Watershed could include increases to impervious areas and new potential sources of pollutants in stormwater runoff. Construction activities associated with development could temporarily increase the number of exposed surfaces that could contribute to sediments in stormwater runoff. Additionally, materials associated with construction activities could be deposited on surfaces and carried to receiving waters in stormwater runoff. Continued development and redevelopment within the Santa Clara River Watershed could also increase the amount of impervious surface, which could increase stormwater runoff rates and amounts, as well as result in changes in land use that may increase the amount of pollutants in stormwater runoff. All cumulative development in the watershed would be subject to the existing regulatory requirements to protect water quality and minimize increases in stormwater runoff. For example, the Construction General Permit requires the development and implementation of a SWPPP for all construction sites larger than 1 acre to mitigate potential impacts to water quality from polluted stormwater runoff.

Every two years, the Los Angeles RWQCB must re-evaluate water quality within its geographic region and identify those water bodies not meeting water quality standards. For those impaired water bodies, a TMDL must be prepared and implemented to reduce pollutant loads to levels that would not contribute to a violation of water quality standards. All development within the Santa Clara River Watershed would be subject to the water quality standards outlined in the Basin Plan and must comply with any established TMDLs. The continuing review process would ensure that cumulative development within the watershed would not substantially degrade water quality.

Los Angeles County and other co-permittee cities within the Santa Clara River Watershed are subject to the requirements of their respective MS4 Permits. Currently, the MS4 Permits require that the project designers and/or contractors of all new development and redevelopment projects that fall under specific priority project categories must develop WQMPs that include LID design requirements related to water quality. The LID features would address long-term effects on water quality within the Santa Clara River Watershed and ensure BMPs and LID designs minimize potential water quality concerns to the maximum extent practicable. Therefore, impacts associated with water quality standards and polluted runoff in the watersheds would be minimized and the proposed project's contribution to cumulative impacts would not be cumulatively considerable.

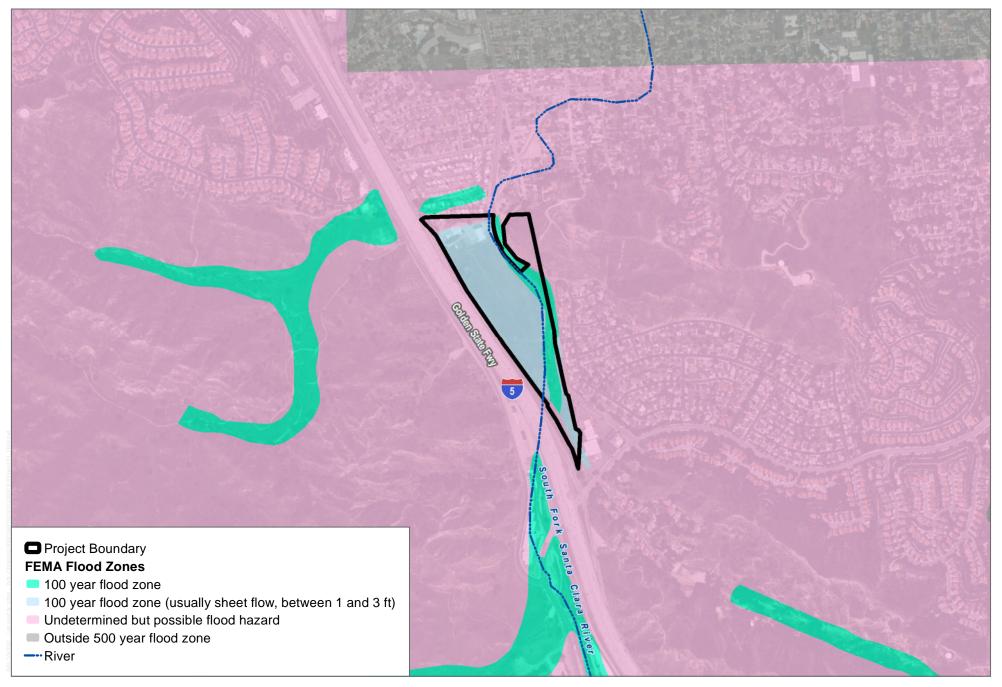
Development of related cumulative projects would increase land use intensities in the water supply service area, resulting in increased water usage. As with the proposed project, related cumulative projects would also include groundwater as a source of water supply. However, the City's UWMP has planned for the provision of regional water during normal, dry, and multiple dry years. The plan uses regional population, land use plans, and projections of future growth as the basis for planning water system improvements (including water treatment plants) and demonstrating compliance with state water conservation goals and policies. As such, to the extent that related projects are generally consistent with regional growth patterns and projections, cumulative projects would not be expected to result in increased water usage causing the need for new entitlements, resources, and/or treatment facilities that are not already being planned to accommodate regional growth forecasts.

Certain qualifying projects would be subject to water supply assessment requirements, which assess the sufficiency of supply for existing and future demands, to serve as evidentiary basis during CEQA review on such projects. Further, compliance with the CALGreen would be required for new developments. This would ensure that many of the related projects, as well as the proposed project, do not result in wasteful or inefficient use of limited water resources and may in fact result in an overall decrease in water use per person. Due to water planning efforts and

water conservation standards, impacts to groundwater supplies would be minimized and the contributions of the proposed project to cumulative impacts would not be cumulatively considerable.

4.9.8 References Cited

- California Department of Water Resources. 2019. Sustainable Groundwater Management Act, 2018 Basin Prioritization, Process and Results. Prepared by the State of California, California Natural Resources Agency, Department of Water Resources, Sustainable Groundwater Management Program. January 2019. Accessed January 25, 2019. https://water.ca.gov/-/media/DWR-Website/Web-Pages/Programs/Groundwater-Management/Basin-Prioritization/Files/2018-Sustainable-Groundwater-Management-Act-Basin-Prioritization.pdf?la=en&hash=B9F946563AA3E6B338674951A7FFB0D80B037530.
- City of Santa Clarita. 2021. General Plan, Safety Element, 2021.
- FEMA. 2022. "FEMA Flood Map Service Center: Search by Address." https://msc.fema.gov/arcgis/rest/directories/arcgisjobs/nfhl_print/mscprintb_gpserver/j55d955a737ab4b1bb05008b6aee600ad/scratch/FIRMETTE_b2b66dda-0008-4eaa-8c3d-2c1170cd3ba9.pdf, Accessed November 9, 2022.
- Kennedy/Jenks Consultants. 2014. *Upper Santa Clara River 2014 Integrated Regional Water Management Plan,* February, 2014.
- LACDPW. 2010. Construction Site Best Management Practices (BMPs) Manual. August 2010. Accessed November 11, 2018. http://dpw.lacounty.gov/cons/specs/BMPManual.pdf.
- LACDPW. 2014. Low Impact Development Standards Manual. Accessed January 22, 2019. https://dpw.lacounty.gov/ldd/lib/fp/Hydrology/Low%20Impact%20Development%20Standards% 20Manual.pdf.
- SCVGSA (Santa Clarita Valley Groundwater Sustainability Agency). 2022. Santa Clara River Valley East Groundwater Subbasin Groundwater Sustainability Plan. https://scvgsa.org/wp-content/uploads/2022/02/Santa-Clara-River-Valley-East-Groundwater-Subbasin-GSP.pdf.



SOURCE: Bing Imagery 2022, FEMA 2019

FIGURE 4.9-1
FEMA Flood Zones
Wiley Canyon Project

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4.10 Land Use and Planning

This section describes the existing land use and planning setting of the proposed Wiley Canyon Project (project) site, identifies associated regulatory requirements, evaluates potential impacts, and identifies mitigation measures where necessary to address potentially significant adverse impacts related to implementation of the proposed project. The analysis is based on a review of existing resources and applicable laws, regulations, and guidelines. The information presented in this section was collected from a number of publicly available sources, including the City of Santa Clarita General Plan, the Santa Clarita Municipal Code, and the Southern California Association of Governments (SCAG) Connect SoCal (SCAG 2020).

4.10.1 Environmental Setting

Existing Project Site Land Uses

The project site is approximately 31.8 acres in size and is currently vacant with the exception of two single-story metal buildings, two mobile homes, former mule barns, and one drained, man-made water basin associated with the former Smiser Mule Ranch which historically occupied the site. Ruderal vegetation, grass, brush, and trees (including oak trees) cover the majority of the project site. The City's General Plan and Zoning designation for the project site is Mixed Use – Neighborhood (MX-N), and the site is located within a Planned Development Overlay (PD) zone. See Figure 3-2a, Existing Conditions, Figure 3-2b, Zoning, and Figure 3-2c, Land Use, for existing on-site and surrounding land uses and more discussion within Chapter 3, Project Description, of this EIR.

Surrounding Land Uses

As depicted in Figures 3-2a through 3-2c, the project site is surrounded by suburban development, vacant land previously disturbed by past agricultural activities, and limited commercial uses. A mobile home development, known as the Mulberry Mobile Home Park, borders the site to the north. A flood control channel is located between the northern segments of the project site and Wiley Canyon Road, and single-family residences are located northeast of the project boundary. Wiley Canyon Road, a north-south two-lane roadway, partially borders the site to the east, and existing electrical power lines run north-south on the eastern edge of the Wiley Canyon Road right-of way. To the south of the project site is a commercial area with a range of uses including Valley Vascular Associates, Academy Swim Club, Survival of the Fittest Health and Wellness, and the Santa Clarita Athletic Club. Interstate 5 (I-5) freeway borders the site to the west, separated from the project site by a chain-linked fence.

Land Use History

The northern portion of the site has been historically used as a mule ranch and pastureland. Two on-site structures were constructed in 1978 and 1980, respectively (see Appendix H, Phase I ESA). Historic uses of the Smiser Mule Ranch include ranch operations and on-site residences. The project site was last used as a woodshop for furniture and cabinet manufacturing within the existing metal buildings and is currently used for recreational vehicle (RV) and boat storage. Two water wells, two above ground water tanks, two propane tanks, and an underground septic system in the vicinity of the residential structures were recorded on site. No oil or gas uses, or activity has been recorded on site.

The northeastern portion of the project site, east of Wiley Canyon Road, consists of vacant land on an elevated hillside. This portion of the site is improved with an existing retaining wall and dirt roadways which provide access

for an existing easement owned and maintained by the Los Angeles County Public Works, Flood Control District, which bisects the project site to accommodate existing drainage flow associated with the South Fork of the Santa Clara River.

The South Fork Santa Clara River flows into the project site through a triple concrete box culvert under the I-5 freeway at the southern end of project site and continues northerly into a concrete-lined channel. According to the Aquatic Resources Delineation Report prepared for the project (Appendix C), the South Fork of the Santa Clara River and the unnamed intermittent drainage to which it connects at the southern end of the project site are two aquatic resources considered to be waters of the U.S. and waters of the State, and therefore subject to the jurisdiction of the U.S. Army Corps of Engineers (USACE) under Section 404 of the Clean Water Act (CWA), the Los Angeles Regional Water Quality Control Board (RWQCB) under Section 401 of the CWA, the California Department of Fish and Wildlife (CDFW) under California Fish and Game Code Section 1600 et. seq., and the Porter-Cologne Water Quality Control Act (Appendix E).

According to the City's Land Use Element of the General Plan, the project site and surrounding land uses (e.g., commercial development to the south) were identified within the City's General Plan as Special Development Areas known as the Smiser Ranch within the Calgrove Corridor. As such, the project site with the MX-N General Plan land use designation was assumed to consist of specific buildout scenarios. See Section 4.10.2, below, for discussion.

4.10.2 Regulatory Framework

State

California Planning and Zoning Law

The California Planning and Zoning Law (Government Code Sections 65000–66499.58) provides the legal framework for California cities' and counties' local planning and land use. Under state planning law, each city and county must adopt a comprehensive, long-term general plan. California law requires cities to adopt a general plan. Such general plans must, at a minimum, include a land use, circulation, housing, conservation, open space, noise, and safety element. Each of these elements must contain text and descriptions setting forth objectives, principles, standards, policies, and plan proposals; diagrams and maps that incorporate data and analysis; and mitigation measures. The process of adopting or amending a general plan requires public participation. The City of Santa Clarita amended its General Plan in 2011.

Regional

Southern California Association of Governments

The Southern California Association of Governments (SCAG) is a Joint Powers Authority under California law, established as an association of local governments and agencies that voluntarily convene as a forum to address regional issues. Under federal law, SCAG is designated as a Metropolitan Planning Organization and under state law as a Regional Transportation Planning Agency and a Council of Governments. The SCAG region encompasses six counties (Imperial, Los Angeles, Orange, Riverside, San Bernardino, and Ventura) and 191 cities in an area covering more than 38,000 square miles. Los Angeles County and the City are within the SCAG region.

Connect SoCal

The Regional Transportation Plan (RTP) is a long-range transportation plan that is developed and updated by the Southern California Association of Governments (SCAG) every four years to guide transportation investments throughout the region. The Sustainable Communities Strategy (SCS) is a required element of the RTP that integrates land use and transportation strategies to achieve California Air Resources Board emissions reduction targets pursuant to Senate Bill 375. On September 3, 2020, the SCAG Regional Council adopted the 2020-2045 RTP/SCS (Connect SoCal). Connect SoCal includes goals to increase mobility and enhance sustainability for the region's residents and visitors and encompasses three principles to improve the region's future: mobility, economy, and sustainability. In addition, Connect SoCal provides a regional investment framework to address the region's transportation and related challenges, while enhancing the existing transportation system and integrating land use into transportation planning (SCAG 2020).

To address the mobility challenge of the region's continuing roadway congestion, Connect SoCal proposes transportation investments in transit; passenger and high-speed rail; active transportation; transportation demand management; transportation systems management; highways; arterials; goods movement; aviation and airport ground access; and operations and maintenance projects. Connect SoCal recommends local jurisdictions accommodate future growth within existing urbanized areas, particularly near existing transit, to reduce VMT, congestion, and greenhouse gas emissions. The Connect SoCal approach to sustainably manage growth and transportation demand would reduce the distance and barriers between new housing, jobs, and services and would reduce vehicle travel and greenhouse gas emissions. As part of Connect SoCal, SCAG develops population and housing forecasts for the SCAG region and for the jurisdictions that make up the SCAG region.

Local

City of Santa Clarita General Plan

The Santa Clarita General Plan is the primary planning document for the incorporated areas of the City. The General Plan outlines goals and policies that are intended to guide new planning and development efforts within the City in compliance with state requirements. The General Plan is part of a larger collaborative planning effort between the City and the County of Los Angeles (County) called the "One Valley One Vision." This Plan involved coordination between the City and County for a unified vision for a larger planning area made up of the incorporated and unincorporated areas of the Santa Clarita Valley. While the incorporated areas of the valley are regulated by the City's General Plan, this General Plan was prepared to reflect the common goals and policies agreed to as part of the One Valley One Vision. For unincorporated areas, the County prepared the Santa Clarita Valley Area Plan, which is consistent with the City's General Plan (Los Angeles Department of Regional Planning 2012). As such, both plans reflect the common goals and policies agreed to as part of the One Valley One Vision.

Each element of the City's General Plan contains goals and policies that are applicable to the project. Table 4.10-1 analyzes the consistency of the project with goals, objectives, and policies contained in the Land Use Element. The Economic Development, Circulation, Noise, Conservation and Open Space, and Safety Elements of the General Plan have goals, objectives, and policies that are applicable to the proposed project; however, because these elements are considered in Sections 4.1 through 4.17 of this EIR, only the goals from these elements (as opposed to each individual objective and policy) are analyzed in Table 4.10-1.

Land Use Element

The Land Use Element is the City's long-term guide to development that, when used in coordination with the Santa Clarita Valley Area Plan, outlines the City and County's framework for future growth within the Santa Clarita Valley. The Land Use Element contains goals and policies that outline the City's development standards for new housing, retail, office, industrial, parks, open space, and other uses and ensures that new development is consistent with existing and intended land use patterns.

According to the City's General Plan Land Use Element, the project site and its immediate vicinity was identified as a Special Development Area (City of Santa Clarita 2011). The area is characterized with by the following:

"An approximately 38-acre assemblage of land located east of Interstate 5, west of Wiley Canyon Road and north of Calgrove Boulevard is commonly referred to as the Smiser Mule Ranch within the Calgrove Corridor. The northern equestrian property remains largely undeveloped and house multiple farming buildings, large pastures, and two equestrian commercial buildings. A fitness center, a vacant restaurant pad and supporting parking facilities are located on the properties to the south. Given the site's location at the southern portion of the Santa Clarita Valley, just north of the Newhall Pass, and its proximity and visibility to the Interstate 5 corridor which borders the property to the west, this area is considered a gateway into the City of Santa Clarita from the Los Angeles Basin."

Additionally, the Land Use Element describes the area's reasonable development potential. Based on the description of the area above, the Land Use Element estimated approximately 830,000 square feet of commercial development and 702 residential units could be developed within the area designated as MX-N. However, given the number of physical constraints identified in the area (i.e., oak trees, Caltrans right-of-way dedication, the future widening of Wiley Canyon Road to four lanes, electrical easements, and drainage) and potential sensitivity to adjacent residential neighborhoods, the area was limited to not exceed 830,000 square feet (representing a floor area ratio [FAR] of approximately 0.5) of total residential and commercial combined development, excluding parking facilities.

Furthermore, the Land Use Element specifies mixed-use neighborhood and desired development characteristics for potential future uses and development within this area, as follows:

- Be the subject of community outreach and public participation led by the applicant with the Calgrove Corridor Coalition, Calgrove corridor neighborhoods and the Wiley Canyon Elementary School (Newhall School District) prior to formal submittal;
- Preserve the character of existing residential neighborhoods located along the Calgrove Corridor and provide adequate buffer and transition from any development on the subject properties;
- Propose an economic engine with an appropriate amount of jobs, retail, office, restaurant and general commercial square footage combined with neighboring and integrated housing types;
- Be internally and externally pedestrian-oriented;
- Consist of 360-degree architectural design with pedestrian-scaled building massing and forms where adjacent to existing residences, with the use of landscaping to visually soften hard edges of buildings;
- Have varied building heights and create east/west sight lines; building heights taller than 55 feet would require approval of a conditional use permit;
- Include a site-specific and a community-based recreational component;

- Understand that introducing a higher density development at this location would have traffic and pedestrian
 circulation impacts on the existing neighborhood, and therefore to minimize those impacts, special
 attention to access points must be considered and:
- Place internal driveways and walkways and locations of entrances and exits so not to disrupt the flow of traffic into or out of the existing residential neighborhoods, and to allow easy access to and from the project site from the Calgrove Boulevard freeway on-ramp/offramp.

These desired characteristics are analyzed for consistency with the proposed project in Section 4.10.4, below.

Economic Development Element

The Economic Development Element of the General Plan addresses key goals and policies as they pertain to the economic advancement and success of the Santa Clarita Valley. The Economic Development Element focuses on three primary goals: (1) establishing a jobs/housing balance through quality employment opportunities, (2) building an economic base for all communities through increased sales tax generation, and (3) developing economic wealth in the planning area by attracting external monies to the local economy.

Circulation Element

The Circulation Element of the General Plan provides the framework for the continued development of sustainable and efficient transportation within the City and surrounding areas. The Circulation Element plans for increased transportation efficiency through the coordination of land use planning with transportation planning by promoting concentrated development within the City near transit facilities. The Circulation Element includes the following primary goals applicable to the proposed project: (1) a unified and well-maintained network of streets and highways that provides safe and efficient movement of people and goods between neighborhoods, districts, and regional centers, while maintaining community character (Policies C 2.1.1 through C 2.2.15); (2) reduction of vehicle trips and emissions through effective management of travel demand, transportation systems, and parking (Policies C 3.1.1 through C 3.3.8); (3) rail service to meet regional and inter-regional needs for convenient, cost-effective travel alternatives, which are fully integrated into the Valley's circulation systems and land use patterns; (4) transit impact fee rates that are based on the actual impacts of new development on the transit system and that are regularly monitored and adjusted as needed to ensure adequate mitigation; (5) a unified and well-maintained bikeway system with safe and convenient routes for commuting, recreational use, and utilitarian travel, connecting communities and the region (Policies C 6.1.1 and C 6.2.3); and (6) walkable communities, in which interconnected walkways provide a safe, comfortable, and viable alternative to driving for local destinations (Policies C 7.1.1 through C 7.1.10).

Noise Element

The General Plan's Noise Element considers the historical, existing, and future development in the City as it applies to noise-generating construction and operation activities. The Noise Element includes the following primary goals applicable to the proposed project: (1) a healthy and safe noise environment for Santa Clarita Valley residents, employees, and visitors (Policies N 1.1.1 through N 1.1.6); (2) protection for residents and sensitive receptors from traffic-generated noise (Policies N 2.1.1 through N 2.1.7); (3) protection for residential neighborhoods from excessive noise (Policies N 3.1.1 through N 3.1.9); and (4) protection of sensitive uses from commercial and industrial noise generators (Policies N 4.1.1 through N 4.1.3).

Conservation and Open Space Element

The Conservation and Open Space Element manages the impacts of development on natural resources and recreational amenities within the City by ensuring that goals and policies are in place to regulate the preservation of existing natural and recreational resources while continuing to foster economic growth and development. The goals and policies within the Conservation and Open Space Element outline the City's long-term vision of maintaining and providing open space for the residents of Santa Clarita Valley while also ensuring that new open space and recreational resources contribute to the community character of the region (City of Santa Clarita 2011).

Along with the housing element, the open space element has a clear statutory intent and, next to land use, is broadest in scope. Because of this breadth, open space issues overlap those of several other elements. For example, the Land Use Element's issues of agriculture, natural resources, recreation, enjoyment of scenic beauty, and public lands are covered by open space provisions. "Open space for the preservation of natural resources" and "open space used for the managed production of resources" encompass the concerns of the Conservation Element. "Open space for public health and safety" covers issues similar to those found in the Safety Element.

The state-mandated open space and conservation elements have been combined into a single element in the Santa Clarita Valley General Plan update, because of the close relationship between the needs to conserve natural resources and open space. In various sections of this element dealing with biological, historical, scenic, water, and other resources, the need to establish adequate open space to meet conservation goals has been discussed. Therefore, it was determined to be beneficial to plan open space protection in a coordinated manner with resource conservation and to include goals and policies for each of these issues into a single document.

Government Code section 65560(h) defines "open-space land" as any parcel or area of land or water that is essentially unimproved and devoted to specified open-space uses and that is designated on a local or regional open space plan. Within the Santa Clarita Valley, per the General Plan's Conservation Element, the following types of areas have been designated for open space preservation pursuant to state law:

- (1) Open space for the preservation of natural resources including, but not limited to, areas required for the preservation of plant and animal life, including habitat for fish and wildlife species; areas required for ecologic and other scientific study purposes; rivers, streams, lake shores, banks of rivers and streams, and watershed lands.
- (2) Open space used for the managed production of resources, including but not limited to, forest lands, rangeland, agricultural lands and areas of economic importance for the production of food or fiber; areas required for recharge of groundwater basins; and areas containing major mineral deposits, including those in short supply.
- (3) Open space for outdoor recreation, including but not limited to, areas of outstanding scenic, historic and cultural value; areas particularly suited for park and recreation purposes, including access to lake shores, beaches, and rivers and streams; and areas which serve as links between major recreation and open-space reservations, including utility easements, banks of rivers and streams, trails, and scenic highway corridors.
- (4) Open space for public health and safety, including, but not limited to, areas which require special management or regulation because of hazardous or special conditions such as earthquake fault zones, unstable soil areas, flood plains, watersheds, areas presenting high fire risks, area required for the protection of water quality and water reservoirs and areas required for the protection and enhancement of air quality. State law also requires that every

local open-space plan shall contain an action program consisting of specific programs which the legislative body intends to pursue in implementing its open-space plan. Within the planning area, both the City and County have taken numerous actions to preserve open space land for preservation of historic and cultural resources, biological resources, park and recreation use, visual and aesthetic resources, aggregate resources, flood control and watershed protection, and protection of the public from hazardous conditions.

As identified in the Conservation and Open Space Element, California law includes provisions directing preservation of open space by local jurisdictions.¹ In enacting these statutes, the Legislature made the following findings:

(1) the preservation of open-space land is necessary not only for the maintenance of the economy of the state, but also for the assurance of the continued availability of land for the production of food and fiber, for the enjoyment of scenic beauty, for recreation, and for the use of natural resources; (2) discouraging premature and unnecessary conversion of open-space land to urban uses is a matter of public interest and will be of benefit to urban dwellers because it will discourage noncontiguous development patterns that unnecessarily increase the costs of community services to community residents; (3) the anticipated increase in the population of the state demands that cities, counties, and the state at the earliest possible date make definite plans for the preservation of valuable open-space land and take positive action to carry out such plans by the adoption and strict administration of laws, ordinances, rules, and regulations as authorized by this chapter or by other appropriate methods; (4) in order to assure that the interest of all its people are met in the orderly growth and development of the state and the preservation and conservation of its resources, it is necessary to provide for the development of statewide coordinated plans for the conservation and preservation of open-space lands; and (5) cities and counties must recognize that open-space land is a limited and valuable resource that must be conserved wherever possible.

Safety Element

The Safety Element identifies present hazardous conditions and public concerns and establishes goals and policies designed to minimize hazards to acceptable levels. The Safety Element also serves to inform residents, policy makers and developers about hazardous conditions in specific areas and to guide land use patterns and development within the City in ways and locations that will minimize hazards.

Santa Clarita Municipal Code (including the Unified Development Code)

The Santa Clarita Municipal Code includes two titles referred to as the Unified Development Code (UDC). SCMC Title 16 (Subdivisions) and Title 17 (Zoning) constitute the UDC. The UDC outlines the City's standards for development including, without limitation, specifications relating to land use classifications, grading, development within Special Standards Districts, highways, subdivision lot requirements, and mapping specifications. Additionally, the City has adopted many land use control regulations such as oak tree preservations regulations, a hillside and ridgeline preservation regulations, and density bonus regulations that are included as part of the UDC.

The California Legislature added the requirement for an Open Space Element to state law in 1970. Government Code Section 65302(e) states: "[The general plan shall include] an Open Space Element as provided in Article 10.5 (commencing with [Government Code] Section 65560)."

The proposed project must comply with the SCMC. The following sections from SCMC Title 17, Zoning, are specifically applicable to the proposed project:

- Section 17.35.020 Mixed Use Neighborhood (MXN) Zone. This zone is intended for mixed use development, which is encouraged in order to create neighborhoods that integrate residential uses with complementary commercial services, including retail and office uses. Mixed use neighborhoods should be designed in consideration of surrounding development patterns, proximity to public transit, providing roadway and trail linkages to adjacent development where appropriate. Nonresidential uses consistent with this district include those in the neighborhood commercial (CN) and community commercial (CC) districts. The residential density range in mixed use neighborhoods shall be a minimum of six (6) to a maximum of eighteen (18) dwelling units per acre, and maximum floor area ratio for the nonresidential portion of the development shall be 0.5. Building heights shall not exceed fifty (50) feet.
- Section 17.38.060 Planned Development (PD) Overlay. The planned development (PD) overlay zone regulations are intended to provide additional discretion for previously vacant, or underutilized parcels, as identified on the City's zoning map. All new development or redevelopment in excess of fifty percent (50%) valuation of the existing structures, as determined by the Building Official, whether permitted, minor, or conditionally permitted, shall be subject to the approval of a conditional use permit.

4.10.3 Thresholds of Significance

The significance criteria used to evaluate the project impacts to land use and planning are based on Appendix G of the California Environmental Quality Act (CEQA) Guidelines. According to Appendix G of the CEQA Guidelines, a significant impact related to land use and planning would occur if the project would:

- 1. Physically divide an established community.
- 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.

4.10.4 Impacts Analysis

Threshold LU-1. Would the project physically divide an established community?

The project site consists of approximately 31.8 acres of vacant land located at 24924 Hawkbryn Avenue, bordered by I-5 to the west, Wiley Canyon Road to the east, Hawkbryn Avenue to the north, and Calgrove Boulevard to the south, within the Newhall area of the City. As described in Chapter 3, Project Description, of this EIR, the proposed project would result in the creation of six separate lots (ranging in size from 31,011 square feet (0.71 acres) to 356,007 square feet (8.2 acres)) and the redevelopment of existing vacant land with a new mixed-use development consisting of a senior living facility, commercial space, multifamily residential apartments, a publicly accessible outdoor recreational field space, and off-site circulation improvements. As shown on Figure 3-4a through 3-4c, Tentative Tract Map, the project site would include three planning areas.

Typically, the provision of new roads or easements planned to traverse, and thereby divide, an existing neighborhood would result in a significant adverse impact. Redevelopment of the project site is not anticipated to result in the physical division of an established community. The following discussion details potential construction and operational impacts associated with project implementation.

Construction

The project's off-site improvements would be focused on transportation infrastructure installations, including but not limited to new roundabouts, traffic signals, Class I and II bike lanes on Wiley Canyon Road and Calgrove Boulevard, and pedestrian trails. The project's off-site improvements would have the potential to temporarily interrupt the flow, access, and connectivity of the surrounding community. Wiley Canyon Road is a north-south roadway that runs adjacent to the project site as well as provides access to surrounding residential communities. Off-site improvements such as the construction of roundabouts could disrupt the flow of vehicular traffic to and from these residential neighborhoods. However, construction activities on Wiley Canyon Road would be temporary and short-term. Section 4.16, Transportation, further analyzes the potential impacts associated with increased hazards due to a geometric design feature and inadequate emergency access. Once operational, the improvements to Wiley Canyon Road would not result in less connectivity and access to the surrounding community as compared to existing conditions. No road closures would occur once construction is complete. For more discussion on transportation-related construction impacts, see Section 4.16, Transportation, of this EIR. Given this, construction-related impacts are anticipated to be **less than significant**. No mitigation is required.

Operation

Under existing conditions, the project site is vacant, surrounded by fencing, and contained to the parcels adjacent to Wiley Canyon Road. The majority of project site is contained within an area west of Wiley Canyon Road with the exception of one portion to the east of Wiley Canyon Road. As such, the project site does not provide physical connections within an established community. Rather, the site consists of underutilized parcels within the existing environment that are generally closed off from the public.

The project's proposed uses would be consistent with the Santa Clarita General Plan land use designation and zoning, as demonstrated below under the impact discussion provided for Threshold LU-2. Moreover, as specified in Chapter 3, Project Description, the project requires approvals, including a tentative map to subdivide the project into six lots, a conditional use permit for the development within the Planned Overlay District, Section 401 and 404 Permits from the U.S. Army Corps of Engineers, and a streambed alteration agreement from the California Department of Fish and Wildlife. These required actions would not result in the physical division of existing communities. Therefore, for these reasons the project would not physically divide an established community. Impacts would be **less than significant**. No mitigation is required.

Threshold LU-2. Would the project cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?

As described in Chapter 3, Project Description, the proposed project would result in the redevelopment of existing vacant land with a new mixed-use development consisting of a senior living facility, commercial space, multifamily residential apartments, a publicly accessible outdoor recreational field space, and off-site circulation improvements. The following discussion details the project's consistency with the City's zoning, General Plan, and SCAG's Connect SoCal.

Zoning Consistency

The SCMC, in conformance with the General Plan, regulates land use development in the City. In each zone, the zoning regulations specify the permitted and prohibited uses, and the development standards, including setbacks, height, parking, and design standards, among others. The proposed project would not require a Zone Change for

implementation. As specified in Chapter 3, Project Description, the project requests the following discretionary approvals for implementation:

- Environmental Impact Report certification as required by the California Environmental Quality Act
- Tentative Map to subdivide the project site into six lots
- Grading Permit for up to 44,000 cubic yards of cut and 59,000 cubic yards of fill, and the import of approximately 85,000 cubic yards of fill
- Conditional Use Permit for new development within the Planned Overlay District and gating of multi-family units
- Minor Use Permit for commercial FAR that does not meet the minimum required in the zone
- Development and Architectural Design Review for the development of the proposed project
- Oak Tree Permit for removal of, encroachment upon, and/or impact to existing oak trees

In addition, the project would require the following regulatory permits from responsible agencies:

- Clean Water Act Section 404 Permit from the U.S. Army Corps of Engineers (USACE) (if jurisdictional aquatic resources are impacted)
- Clean Water Act Section 401 Water Quality Certification from the Los Angeles Regional Water Quality
 Control Board (RWQCB) (if jurisdictional aquatic resources are impacted)
- Streambed Alteration Agreement from the California Department of Fish and Wildlife (CDFW) pursuant to California Fish and Game Code Section 1602 (if jurisdictional aquatic resources are impacted)

Figure 3-2b, Zoning, illustrates the project site's zoning as Mixed Use – Neighborhood (MX-N) with a Planned Development Overlay (PD). As specified above, a Conditional Use Permit (CUP) is required for project approval in accordance with SCMC section 17.38.060, which provides additional discretion for previously vacant or underutilized parcels. SCMC section 17.35.020 specifies the MX-N zone includes a maximum density of 18 units per gross acre (du/ac) and a minimum FAR for non-residential components of 0.2. A Minor Use Permit is required given that the proposed commercial space would not meet the minimum zoning requirements for commercial FAR. The project's residential component would result in a density of approximately 12 du/ac², which is within the maximum zoning requirements. As such, with the approval of the proposed CUP and Minor Use Permit the project's proposed uses would be allowed under existing zoning for the project site.

As further discussed in Section 4.1, Aesthetics, of this EIR, applicable zoning regulations also govern scenic quality. Existing regulations include but are not limited to the City's development standards which inform setback standards, open space requirements, and height limits within the SCMC. See the analysis within Section 4.1, Aesthetics, for consistency analysis with SCMC section 17.55.040, Architectural and Design Standards. As demonstrated therein, the project would be consistent with the City's development standards and the SCMC.

Moreover, the project site contains oak trees, which are considered an aesthetic resource and are protected under the SCMC. The Oak Tree Preservation regulations outlines the requirements governing the protection and preservation of oak trees in the City, including regulations for cutting, damage, and encroachment on oak trees and oak woodlands. The project's consistency with the Oak Tree Preservation regulations is further detailed in Section 4.3, Biological Resources.

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³⁷⁹ du / 31.8 ac = 11.9 du/ac or 12 du/ac

Given the above, no zoning amendment is required for consistency. Compliance with applicable zoning regulations would minimize any possible impacts associated with the avoidance or mitigation of an environmental effect. Impacts would be **less than significant**, and no mitigation is required.

General Plan Consistency

Figure 3-2c, Land Use illustrates the project site's land use designation as determined by the City's General Plan. As detailed above in Section 4.10.2, areas designated as Mixed Use – Neighborhood are intended "to create neighborhoods that integrate residential uses with complementary commercial services, including retail and office uses" (City of Santa Clarita 2011). In addition, the General Plan specifies that "[t]he residential density range in mixed-use neighborhoods shall be a minimum of six (6) to a maximum of eighteen (18) dwelling units per acre, and maximum FAR for the non-residential portion of the development shall be 0.5. Building heights shall not exceed 50 feet" (City of Santa Clarita 2011). The project would result in a residential density of approximately 12 du/ac, which would be within the allowable maximum per the General Plan. Additionally, the non-residential components of the project would include a 277,108 square-foot senior living facility and 8,914 square feet of commercial space, which would result in an FAR of approximately 0.33. Finally, the proposed buildings would range from a four-story senior living facility to three- and four-story apartments and not exceed the 50-foot height limit.

As further discussed in Section 4.1, Aesthetics, the General Plan Land Use Element and the Conservation and Open Space Element adopt specific goals pertaining to the protection of scenic resources. These goals applicable to the proposed project are analyzed further below to determine the project's consistency.

Additionally, the project site and its immediate vicinity were identified as a Special Development Area according to the Land Use Element. The Land Use Element considered both physical constraints to the area (i.e., oak trees, Caltrans right-of-way dedication, the future widening of Wiley Canyon Road to four lanes, electrical easements, and drainage) and sensitivity to adjacent residential neighborhoods to reach the area's reasonable development potential. Moreover, the Land Use Element specified mixed-use neighborhood and desired development characteristics for potential future uses and development within this area. The analysis as detailed in Table 4.10-1, Desired Development Characteristics Consistency Analysis, below, demonstrates the project's consistency with the Special Development Area's standards and assumptions.

Table 4.10-1. Desired Development Characteristics Consistency Analysis

Desired Characteristics	Discussion
Buildout Assumptions: Not exceed 830,000 square feet (representing a floor area ratio of approximately 0.5) of total residential and commercial combined development, excluding parking facilities.	Consistent. The project would introduce a 277,108 square feet senior living facility, 8,914 square feet of commercial, and 379 apartments (or 135,594 square feet and 247,378 square feet between the Planning Areas 2 and 3). As such, the project would result in a total of 668,994 square feet of residential and commercial combined development, excluding parking facilities, which is below the established maximum of 830,000 square feet.
1) Be the subject of community outreach and public participation led by the applicant with the Calgrove Corridor Coalition, Calgrove corridor neighborhoods	Consistent. The project applicant held two open house meetings onsite and met individually with homeowners association groups in the vicinity of the project site. Additionally, the project applicant met with the principal of Wiley Canyon Elementary.

First floor of senior living (82,982 square feet) + first floor of commercial (8,914 square feet) = 91,896 square feet / 316,708 square feet (total square feet of Lot 1) = 0.29 FAR

DRAFT EIR FOR WILEY CANYON PROJECT MARCH 2024

Table 4.10-1. Desired Development Characteristics Consistency Analysis

Desired Characteristics	Discussion
and the Wiley Canyon Elementary School (Newhall School District) prior to formal submittal.	
2) Preserve the character of existing residential neighborhoods located along the Calgrove Corridor and provide adequate buffer and transition from any development on the subject properties.	Consistent. The project is confined to a site that does not include existing residential neighborhoods along the Calgrove Corridor. The project would include landscaping and other project design features to adequately buffer the project from the adjacent neighborhoods and properties. The project would include off-site improvements along the Calgrove Corridor at the intersection of Calgrove Boulevard and Wiley Canyon Road. However, these improvements would not affect the character of the existing surrounding uses. No existing residential neighborhoods would be modified, and the project would introduce new residential land uses adjacent to existing residential.
3) Propose an economic engine with an appropriate amount of jobs, retail, office, restaurant and general commercial square footage combined with neighboring and integrated housing types.	Consistent. As described in Section 4.10.2, the General Plan's Special Development Area identified as the Smiser Ranch within the Calgrove Corridor includes the adjacent commercial uses to the south of the project site. While the project would include commercial uses, these uses would be generally considered as community supporting commercial. In addition, the project would introduce a new senior living facility with employment opportunities. It is anticipated that these uses would result in a total of approximately 90 employees. As such, the project proposes an economic engine (in conjunction with the adjacent commercial uses to the south) combined with neighboring and integrated housing types.
4) Be internally and externally pedestrian- oriented.	Consistent. The project proposes pedestrian-oriented development throughout the various components on the site. In addition, the project would result in off-site improvements to the roadways adjacent to the project site, including Wiley Canyon Road. These off-site improvements would include three new roundabouts, new curbs and gutters, a storm drain box culvert extension, new bus bays, bicycle paths (e.g., Classes I and II) and ramps, walking trails and sidewalks, as well as changes to existing directional signage and utilities (i.e., new power poles). Therefore, the project would be internally and externally pedestrian-oriented.
5) Consist of 360-degree architectural design with pedestrian-scaled building massing and forms where adjacent to existing residences, with the use of landscaping to visually soften hard edges of buildings.	Consistent. The project would result in an architectural design with pedestrian-scaled building massing and forms. Further, as detailed in Section 4.1, Aesthetics, the project would be subject to review by the Planning Commission for consistency with Section 17.55.020, Mixed Use Development Standards, of the Municipal Code. Additionally, the project would be subject to Section 17.55.040, Architectural and Design Standards. For more information on the project's design consistency, see Section 4.1, Aesthetics, and Table 4.1-1, Project Consistency with the Community Character and Design Guidelines.

Table 4.10-1. Desired Development Characteristics Consistency Analysis

Desired Characteristics	Discussion
6) Have varied building heights and create east/west sight lines; building heights taller than 55' would require approval of a conditional use permit.	Consistent. See the analysis for Goal No. 5.
7) Include a site-specific and a community-based recreational component.	Consistent. The project proposes active and passive on-site recreational facilities, consisting of 50,600 square feet for passive recreational space, 7,040 linear feet (approximately 1.3 miles) of pedestrian/bike trails, and a 5-acre green belt on site. These proposed improvements would be accessible to on-site residents and provide greater pedestrian network connectivity to both visitors and existing residents in the surrounding vicinity. In addition, the project would include on-site recreational spaces within the proposed senior living facility and multifamily apartments, including gardens, outdoor seating, and a community pool.
8) Understand that introducing a higher density development at this location would have traffic and pedestrian circulation impacts on the existing neighborhood, and therefore to minimize those impacts, special attention to access points must be considered.	Consistent. The project includes off-site infrastructure improvements designed to address circulation within the site's surrounding vicinity. The majority of the off-site infrastructure improvements would be street improvements along Wiley Canyon Road and its intersecting streets, including Fourl Road, Canerwell Street, Valley Oak Court, and Calgrove Boulevard. Street improvements would include three new roundabouts, new bus bays, bicycle paths, walking trails, and sidewalks. Additionally, the intersection of Calgrove Boulevard and I-5 located at the southwest corner of the project site would be signalized. The project's potential impacts to transportation are determined to be less than significant. See Section 4.16, Transportation, of this Draft EIR for more details.
9) Place internal driveways and walkways and locations of entrances and exits so not to disrupt the flow of traffic into or out of the existing residential neighborhoods, and to allow easy access to and from the project site from the Calgrove Boulevard freeway on-ramp/offramp.	Consistent. Public access to the project would be provided by a private street connection to Wiley Canyon Road. The primary project entrance would be located at the northern end of the site and controlled by a single-lane roundabout. An emergency vehicle-only access would be provided by a driveway on Hawkbryn Avenue. The project would also include the installation of off-site roundabouts along Wiley Canyon Road at the project's entrance, Canerwell Street, and at Calgrove Boulevard. The project's potential impacts to transportation are determined to be less than significant. See Section 4.16, Transportation, of this Draft EIR for more details.

Source: City of Santa Clarita 2011

In addition to consistency with the Land Use Element's site-specific development characteristics, the General Plan contains goals and policies that guide development and are applicable to the proposed project. Table 4.10-2 analyzes the project's consistency with goals, objectives, and policies contained in the Land Use Element of the General Plan. The Economic Development, Circulation, Noise, Conservation and Open Space, and Safety Elements of the General Plan have goals, objectives, and policies that are applicable to the proposed project; however, because these elements are also considered in Sections 4.1 through 4.17 of this EIR, only the goals from these elements (as opposed to each applicable individual policy) are analyzed in Table 4.10-2.

Table 4.10-2. General Plan Land Use Consistency Analysis

Goals, Objectives, and Policies	Discussion
Land Use Element	
Goal LU 1: An interconnected Valley of Villages providing diverse lifestyles, surrounded by a greenbelt of natural open space.	Consistent. The proposed project would redevelop existing, currently vacant land to a multifamily residential community with a senior living facility and recreational open space areas. The project proposes active and passive on-site recreational facilities, including 50,600 square feet for passive recreational space, 7,040 linear feet (approximately 1.3 miles) of pedestrian/bike trails, and a 5-acre green belt on site.
Objective LU 1.1: Maintain an urban form for the Santa Clarita Valley that preserves an open space greenbelt around the developed portions of the Valley, protects significant resources from development, and directs growth to urbanized areas served with infrastructure.	Consistent. The project site is located on a relatively flat surface adjacent to Wiley Canyon Road. The site also consists of an elevated area to the east of Wiley Canyon Road which would not result in construction activities. Moreover, the project site is currently designated as Mixed Use – Neighborhood by the Land Use Map, and as demonstrated above, the project would be consistent with the following approvals: a Tentative Tract Map to subdivide the project site into six lots, a Grading Permit for proposed construction activities, a Conditional Use Permit for new development within the Planned Overlay District, a Minor Use Permit for commercial FAR requirements, and Development and Architectural Design Review for discretionary approval on the project's design. Wiley Canyon Road is an existing north-south road, and the project would connect to existing infrastructure/utilities to adequately serve the site during operations. The project site contains limited environmental constraints (e.g., South Fork of the Santa Clara River); however, due to project design features, the project proposes a soil cement bank protection, adjacent to the asphalt trail and maintenance road, for protection during a 25-year storm event. In addition, the project seeks approval for various regulatory permits: Clean Water Act Section 404 Permit from the U.S. Army Corps of Engineers (USACE) (if jurisdictional aquatic resources are impacted); Clean Water Act Section 401 Water Quality Certification from the Los Angeles Regional Water Quality Control Board (RWQCB) (if jurisdictional aquatic resources are impacted); and a Streambed Alteration Agreement from the California Department of Fish and Wildlife (CDFW) pursuant to California Fish and Game Code Section 1602 (if jurisdictional aquatic resources are impacted). For more discussion on impacts related to biological resources, see Section 4.3, Biological Resources, of this EIR. As identified herein, with implementation of mitigation, impacts to biological resources would be less than signifi
Policy LU 1.1.1: Where appropriate, protect mountains and foothills surrounding the Valley floor from urban development by designating these areas as Open Space or Non-Urban uses on the Land Use Map.	Not Applicable. The project site is not located within the mountains or foothills surrounding the Santa Clarita Valley floor. Moreover, the project is designated as Mixed Use – Neighborhood by the Land Use Map and not for Open Space or Non-Urban uses.

Table 4.10-2. General Plan Land Use Consistency Analysis

Goals, Objectives, and Policies	Discussion
Policy LU 1.1.2: On the Land Use Map, concentrate urban development within flatter portions of the Santa Clarita Valley floor in areas with limited environmental constraints and served with infrastructure.	Consistent. See the analysis for Objective LU 1.1 above.
Policy LU 1.1.3: Discourage urban sprawl into rural areas by limiting non-contiguous, "leap-frog" development outside of areas designated for urban use.	Consistent. The project would not result in urban sprawl into rural areas. Although the project site was once operated for the Smiser Ranch, existing conditions are vacant and non-operational. The project site is surrounded by residential development to the north and east and located adjacent to the I-5 freeway corridor. Furthermore, the project site was identified by the General Plan as a Special Development Area with a land use designation and zoning consistent with the proposed project.
Policy LU 1.1.4: Preserve community character by maintaining natural features that act as natural boundaries between developed areas, including significant ridgelines, canyons, rivers and drainage courses, riparian areas, topographical features, habitat preserves, or other similar features, where appropriate.	Consistent. The proposed project would redevelop an existing vacant site. Construction activities would not result in changes to topography, including significant ridgelines, canyons, or other topographical features. As further discussed in Section 4.1, Aesthetics, of this EIR, the project would not result in significant impacts to scenic resources. The project site includes a portion of the South Fork of the Santa Clara River. Due to proposed design features, the project would include a soil cement bank protection,
	adjacent to the asphalt trail and maintenance road, for protection during a 25-year storm event. In addition, the project seeks approval for various regulatory permits: Clean Water Act Section 404 Permit; Clean Water Act Section 401 Water Quality Certification; and a Streambed Alteration Agreement. For more discussion on impacts related to biological resources, see Section 4.3, Biological Resources, of this EIR. As discussed therein, with implementation of mitigation, impacts to riparian and habitat areas would be less than significant.
Policy LU 1.1.5: Increase infill development and re-use of underutilized sites within and adjacent to developed urban areas to achieve maximum benefit from existing infrastructure and minimize loss of open space, through redesignation of vacant sites for higher density and mixed use, where appropriate.	Consistent. See the analysis for Objective LU 1.1 above.
Policy LU 1.1.6: Preserve the rural lifestyle in canyons and low-density, outlying areas of the Santa Clarita Valley, through designating these areas as Non-Urban on the Land Use Map, where appropriate.	Consistent. The project site is not designated as Non-Urban. Although the project site previously including agricultural uses associated with the Smiser Ranch, existing conditions are vacant and non-operational. Moreover, the project site was identified by the General Plan as a Special Development Area with a land use designation and zoning consist with the proposed project.

Table 4.10-2. General Plan Land Use Consistency Analysis

Goals, Objectives, and Policies	Discussion	
Policy LU 1.1.7: Preserve and protect important agricultural resources, including farmland and grazing land, through designating these areas as Open Space and Non-Urban on the Land Use Map, where appropriate.	Not Applicable. The project site is not designated as Open Space or Non-Urban on the Land Use Map. Although the project site previously including agricultural uses associated with the Smiser Ranch, existing conditions are vacant and non-operational. The General Plan designates the site as Mixed Use – Neighborhood.	
Objective LU 1.2: Maintain the distinctive community character of villages and neighborhoods throughout the planning area by establishing uses, densities, and design guidelines appropriate to the particular needs and goals of each area, including but not limited to the following:	Consistent. The project site was identified by the General Plan as a Special Development Area with a land use designation and zoning consist with the proposed project. As demonstrated above in Table 4.10-1, the project would be consistent with the desired characteristics outlined in the Land Use Element. In addition, the project would be consistent with the provisions outlined in Section 17.55.020, Mixed Use Development Standards, and Section 17.55.040, Architectural and Design Standards, of the Municipal Code. For more discussion on the project's impact to aesthetics, see Section 4.1, Aesthetics, of the EIR. As discussed therein, visual and aesthetic impacts would be less than significant.	
Policy LU 1.2.1: In Newhall, provide opportunities for new business and housing by implementing the Downtown Newhall Specific Plan, provide incentives to promote infill development and re-use of underutilized sites, and continue to plan for the future development of North Newhall.	Consistent. The project site is located within the Newhall community of the Santa Clarita Valley. However, this policy is directed for the City and not related to the development of the proposed project. The project would include the introduction of residential and commercial uses on an infill site in the western edge of Newhall. As such, the proposed project would not conflict with implementation of this policy.	
Policy LU 1.2.2: In Valencia, promote business development, job creation, and expansion of regional commercial, civic, cultural, and entertainment uses, to create a vibrant Town Center serving as a community focal point for the entire Santa Clarita Valley.	Not Applicable. The project site is not located in Valencia. The Valencia Town Center is approximately 3 miles to the north of the project site. As such, the proposed project would not conflict with implementation of this policy.	
Policy LU 1.2.3: In Saugus, promote revitalization of older commercial areas; relieve traffic congestion; look for opportunities to minimize cut-through traffic; and enhance streetscapes with landscaping, lighting, benches and other fixtures.	Not Applicable. The project site is not located in Saugus. The project site is approximately 3 miles to the south of this community. As such, the proposed project would not conflict with implementation of this policy.	
Policy LU 1.2.4: In Canyon Country, promote revitalization along Sierra Highway from Soledad Canyon Road to Vasquez Canyon Road by encouraging retail and service uses, and enhance on and off ramps along the Antelope	Not Applicable. The project site is not located in Canyon Country. The project site is over 5 miles to the southwest of this community. As such, the proposed project would not conflict with implementation of this policy.	

Table 4.10-2. General Plan Land Use Consistency Analysis

Goals, Objectives, and Policies	Discussion
Valley Freeway with landscape amenities and appropriate uses.	
Policy LU 1.2.5: In Sand Canyon, ensure compatibility of development with existing rural, equestrian lots and the adjacent National Forest land; provide additional recreational trail links; minimize impacts to the Santa Clara River from incompatible development; and maintain community character in accordance with the City's Sand Canyon Special Standards District.	Not Applicable. The project site is not located in Sand Canyon. The project site is over 8 miles to the southwest of this community. As such, the proposed project would not conflict with implementation of this policy.
Policy LU 1.2.6: In Placerita Canyon, ensure compatibility of development with existing rural, equestrian lots and the adjacent National Forest land; maintain community character in accordance with the City's existing Placerita Canyon Special Standards District (PCSSD); provide an orderly transition between existing rural and low-density residential uses and proposed new development; and require the provision of needed infrastructure. The City and the Placerita Canyon Property Owners Association shall work together to amend the PCSSD in the Unified Development Code (UDC) to provide additional certainty and expectations for the developed areas within the District and to create flexibility and continuity, subject to the provisions outlined above, for undeveloped properties in the District. These changes will include transitional density provisions, specific UDC rules and regulations that will clearly outline development codes within Placerita Canyon.	Not Applicable. The project site is not located within or within the vicinity of Placerita Canyon. Placerita Canyon is located approximately 2.5 miles to the northeast of the project site and separated by foothills and other elevated terrain. As such, the proposed project would not conflict with implementation of this policy.
Policy LU 1.2.7: On the Whittaker-Bermite site, continue to work with the property owner to facilitate master planning, remediation, and the economic reuse of the property to include roadway infrastructure and transit-oriented development around the Metrolink station.	Not Applicable. The project site is approximately 3.5 miles to the southwest of the Whittaker-Bermite and the Santa Clarita Metrolink station. As such, the proposed project would not conflict with implementation of this policy.
Policy LU 1.2.8: In Castaic, promote expansion of neighborhood commercial uses to serve local residents; address traffic congestion; and ensure compatibility between highway-oriented commercial uses and nearby	Not Applicable. The project site is not located in Castaic. The project site is over 9 miles to the southeast of this community. As such, the proposed project would not conflict with implementation of this policy.

Table 4.10-2. General Plan Land Use Consistency Analysis

Goals, Objectives, and Policies	Discussion
residential uses; and maintain community character in accordance with the County's Castaic Area Community Standards District.	
Policy LU 1.2.9: In Val Verde, protect the existing rural lifestyle and small town community character while providing residents with additional access to needed services; and ensure compatibility between existing residential areas and the nearby landfill; and maintain community character in accordance with the County's Castaic Area Community Standards District.	Not Applicable. The project site is not located in Val Verde. The project site is over 7 miles to the southeast of this community. As such, the proposed project would not conflict with implementation of this policy.
Policy LU 1.2.10: In Agua Dulce, recognize the scenic and environmental qualities of Vasquez Rocks in future planning; protect the existing rural lifestyle while providing opportunities to enhance the village center; and provide additional services to residents; and maintain community character in accordance with the County's Agua Dulce Community Standards District.	Not Applicable. The project site is not located in Agua Dulce. The project site is over 15 miles to the southwest of this community. As such, the proposed project would not conflict with implementation of this policy.
Policy LU 1.2.11: In Pico Canyon, recognize the historic significance of Mentryville in future planning; preserve the existing rural development pattern; and ensure compatibility of new development with the adjacent Significant Ecological Area and habitat.	Not Applicable. The project site is not located in Pico Canyon. The project site is over 4 miles to the southeast of this community. As such, the proposed project would not conflict with implementation of this policy.
Policy LU 1.2.12: In the Fair Oaks community, facilitate location of commercial and community services in proximity to residences to serve local needs.	Not Applicable. The project site is not located in the Fair Oaks community. The project site is over 6 miles to the southwest of this community. As such, the proposed project would not conflict with implementation of this policy.
Policy LU 1.2.13: Encourage use of the specific plan process to plan for cohesive, vibrant, pedestrian-oriented communities with mixed uses, access to public transit, and opportunities for living and working within the same community.	Not Applicable. The project site is not located within an area designated by a specific plan. This policy is directed for the City and not related to the development of the proposed project. The project would include the introduction of residential and commercial uses on an infill site designated as Mixed Use – Neighborhood. As such, the proposed project would not conflict with implementation of this policy.
Policy LU 1.2.14: Evaluate development fee schedules on an ongoing basis to determine fee incentives to attract development.	Not Applicable. This policy is directed for the City and not related to the development of the proposed project. As demonstrated throughout this EIR, the project would be subject to development fees, as applicable. As such, the proposed project would not conflict with implementation of this policy.

Table 4.10-2. General Plan Land Use Consistency Analysis

Goals, Objectives, and Policies	Discussion
Objective LU 1.3: Plan for density and intensity of development that respects and is reflective of the natural terrain.	Consistent. The project site was identified by the General Plan as a Special Development Area with a land use designation and zoning consist with the proposed project. Development of the project site would involve construction activities including grading. However, as demonstrated above in the analysis for Objective LU 1.2, the project is designed to respect and not impact the natural terrain.
Policy LU 1.3.1: Encourage subdivision design techniques that reflect underlying physical topography or other unique physical features of the natural terrain.	Consistent. One of the project's requested approvals include a Tentative Map to subdivide the project site into six lots. Subdivision design techniques would be reviewed during the City's plan check review process. In addition, the project would be subject to review and approval by the Planning Commission to ensure provisions outlined in Section 17.55.020, Mixed Use Development Standards, and SCMC Section 17.55.040, Architectural and Design Standards, are met.
Policy LU 1.3.2: Substantially retain the integrity and natural grade elevations of significant natural ridgelines and prominent landforms that form the Valley's skyline backdrop.	Consistent. The project site would involve construction activities including grading; however, such activities are not anticipated to substantially affect the integrity of scenic resources. Impacts would be less than significant with no mitigation. For more discussion on the project's less than significant impacts to scenic resources, see Section 4.1, Aesthetics, of this EIR.
Policy LU 1.3.3: Discourage development on ridgelines and lands containing 50% slopes so that these areas are maintained as natural open space.	Not Applicable. The project is proposed on previously disturbed, relatively flat land. As such, the proposed project would not conflict with the implementation of this policy.
Policy LU 1.3.4: Encourage density transfers where appropriate to facilitate development in more suitable locations while retaining significant natural slopes and areas of environmental sensitivity, provided that urban densities (exceeding one dwelling unit per acre) are not permitted in rural areas.	Not Applicable. The proposed project does not require the use of a density transfer. Additionally, the project site is not located in a sloped or environmentally sensitive area. Therefore, the proposed project would not conflict with the implementation of this policy.
Policy LU 1.3.5: Encourage flexible siting and design techniques within hillside areas in order to preserve steep slopes or other unique physical features, including clustering of residential units provided all residential lots meet the applicable minimum lot size requirements of the Land Use Element and the Zoning Ordinance, including the Community Special Standards Districts.	Not Applicable. The project site is not located in a hillside area and would therefore not impact steep slopes or other unique physical features. As such, the proposed project would not conflict with the implementation of this policy.

Table 4.10-2. General Plan Land Use Consistency Analysis

Goals, Objectives, and Policies	Discussion
Policy LU 1.3.6: Encourage retention of natural drainage patterns and the preservation of significant riparian areas, both of which are commonly located in hillside areas.	Partially Consistent. Under existing conditions, the project site is predominantly undeveloped and infiltrates onsite or drains northwest toward the South Fork of Santa Clara River. The project's development would introduce new impervious surfaces over much of the project site and alter the existing drainage patterns. The project, however, would include the construction of three water quality/retention basins that would enhance water quality to reduce stormwater runoff flow rates and volumes. The runoff from the site would be collected in a series of catch basins and storm drain lines and directed to one of the retention basins for onsite infiltration. As described in Section 4.3, Biological Resources, the project site supports riparian habitat. However, much of this riparian habitat is associated with the human-made concrete drainage channel that runs through the project site. Furthermore, MM-BIO-5 would require on- or off-site restoration of protected water and associated riparian habitat at a ratio of no less than 2:1. As such, project impacts on drainage patterns and riparian habitat to a less-than-significant level.
Goal LU 2: A mix of land uses to accommodate growth, supported by adequate resources and maintaining community assets.	Consistent. The proposed project would include the development of 379 multifamily apartments, a senior care facility, commercial space, and recreational and open space improvements. As discussed in Section 4.13, Population and Housing, the addition of 379 multifamily apartment would assist the City in meeting its housing needs. Additionally, as outlined in Section 4.14, Public Services, the project's applicant would be required to pay development impact fees in order to ensure the City's public services would be able to continue to provide adequate services to the project site and the City. Furthermore, the project site is located on primarily vacant, previously disturbed land.
Objective LU 2.1: Provide adequate, suitable sites for housing, employment, business, shopping, public facilities, public utility facilities, and community services to meet current needs and the anticipated needs of future growth.	Consistent. See response to Goal LU 2.
Policy LU 2.1.1: On the Land Use Map, designate a balance of land uses in appropriate amounts to meet future community needs, while ensuring that no use designation is over-represented in a manner that is not economically viable.	Consistent. The project proposes to construct residential apartments, a senior care facility, commercial space, and recreational and open space. Therefore, the proposed project would not conflict with the implementation of this policy.
Policy LU 2.1.2: On the Land Use Map, integrate land use designations in a manner that promotes healthy, walkable communities, by providing an appropriate mix of residential and service uses in proximity to one another.	Consistent . The proposed project would promote healthy, walkable communities through the development of pedestrian and bike trails, including 1.3 miles of recreational trails on site, active and passive recreational facilities, and commercial space in close proximity to residences.

Table 4.10-2. General Plan Land Use Consistency Analysis

Goals, Objectives, and Policies	Discussion
Policy LU 2.1.3: Provide a range of land use types and densities to reflect the special characteristics, lifestyles, and opportunities that differentiate various communities and villages in the Santa Clarita Valley, including urban, suburban, and rural living environments.	Consistent. The proposed project would provide residential, commercial, and recreational land uses to the project's residents and to the City at large. Additionally, the City would review the project for consistency with all applicable standards during the development review process.
Policy LU 2.1.4: Adopt a compatible set of land use designations between the County and City of Santa Clarita for land in the Santa Clarita Valley, to be implemented through standards and zones applied by each agency to ensure compatibility with the character of each area and with the goals of the County's Area Plan and the City's General Plan.	Not Applicable. Although this policy is directed for the City and County of Los Angeles, the project would be implemented on the site without a change in the existing land use designation of Mixed Use – Neighborhood. Furthermore, the site and immediate surrounding area is identified by the General Plan as a Special Development area with identified standards and assumptions for future uses. As shown above, the proposed project would be consistent with the desired characteristics outlined in the General Plan for the project site and the surrounding area.
Policy LU 2.1.5: Identify areas with hazardous conditions and ensure that uses in or adjacent to these areas pose minimal risk to public health or safety.	Consistent. The proposed project site is located in a Very High Fire Hazard Severity Zone (VHFHSZ) within a Local Responsibility Area. The project would include fire protection measures including fire access, a Conceptual Wildfire Evacuation Plan, and fuel modification which would reduce fire hazards around all structures. With implementation of fire protection and prevention measures as outlined in MM-FIRE-1 through MM-FIRE-3, impacts related to wildfire would be less than significant. For more discussion on impacts related to wildfire, refer to Section 4.19, Wildfire.
Objective LU 2.2: Protect significant community resources from encroachment by incompatible uses, where feasible and appropriate.	Consistent. The proposed project would develop a vacant, previously disturbed site with residential, commercial, and recreational and open space uses. The project site is underutilized and does not contain notable community resources. The proposed project would introduce new residential and senior living uses immediately adjacent to existing residential uses to the north and east. As such, uses associated with the proposed project are consistent with the surrounding uses.
Policy LU 2.2.1: Identify areas of scenic or aesthetic value to the community, and minimize the designation of uses in these areas that would diminish their aesthetic quality.	Consistent. The proposed project would alter the appearance of the project site relative to existing conditions. The project site, however, is surrounded by existing development including residential development and the I-5 freeway. As such, the appearance of the site under project conditions would be similar to the existing surrounding area. Certain vantage points near the project site, particularly near Wiley Canyon Road, contain views of the surrounding hillsides, mountains, and ridgelines. The quality of these views however, is low due to intervening residential land uses, the I-5 freeway, and aboveground utility infrastructure. As such, hillsides and mountains are regularly obscured by foreground elements and views from Wiley Canyon Road are typically narrow and short. In addition, Wiley Canyon Road changes in elevation, and views vary in

Table 4.10-2. General Plan Land Use Consistency Analysis

Goals, Objectives, and Policies	Discussion
	direction along the road's curvature. Furthermore, the height of the proposed project would not substantially obstruct the views of surrounding hillsides, mountains, and ridgelines. Therefore, the project would not substantially diminish the aesthetic quality of the project site and surrounding area. For further discussion on the project's less than significant impacts related to aesthetics, refer to Section 4.1, Aesthetics.
Policy LU 2.2.2: Identify sites and areas with historical or cultural value to the community, and ensure that uses in or adjacent to these areas will not impact their historical integrity.	Consistent. No historical or unique archaeological resources are located on or adjacent to the project site. A cultural analysis of the site, however, has found that there is a potential for the site to contain unknown historical subsurface archaeological deposits. As such, the project would implement a number of cultural mitigation measures, including the retention of a qualified archaeologist, cultural resources sensitivity training, and archaeological and Native American monitoring. The implementation of these mitigation measures would ensure the impacts to these resources, should they be discovered, would be less than significant. For further information, refer to Section 4.4, Cultural Resources.
Policy LU 2.2.3: Consistent with adopted plans, ensure that adequate open space is set aside and protected from development throughout the planning area in order to provide the benefits of watershed management, habitat preservation and connectivity, and recreational opportunities.	Consistent. The proposed project would be developed on a disturbed, underutilized site. Additionally, the project would include five acres of green belt open spaces, 2.9 acres of undeveloped, open space, as well as approximately 1.3 miles of recreational trails.
Objective LU 2.3: Increase mixed-use development where appropriate to create more livable neighborhoods, walkable business districts, and to reduce vehicle trips, while ensuring land use compatibility, through mixed-use zoning:	Consistent . The proposed project would include a mix of land uses, including residential, commercial, and recreational uses. The project would also include 1.3 miles of pedestrian and bike trails, which would promote walkability and reduce vehicle trips.
Policy LU 2.3.1: In a mixed-use development, residential densities at the higher end of the allowed range should be allowed only if the development incorporates a robust mix of non-residential uses.	Consistent. See discussion for Objective LU 2.3.
Policy LU 2.3.2: Either vertical or horizontal integration of uses shall be allowed in a mixed-use development, with an emphasis on tying together the uses with appropriate pedestrian linkages.	Consistent. See discussion for Objective LU 2.3.

Table 4.10-2. General Plan Land Use Consistency Analysis

Goals, Objectives, and Policies	Discussion
Policy LU 2.3.3: Manufacturing, processing of goods and materials, and warehousing shall not be allowable uses in a mixed-use development although some light manufacturing and warehousing may be appropriate in second story units.	Consistent. The proposed project would result in the development of a mix of land uses consisting of residential, commercial, and recreational uses; the project would not include manufacturing, processing of goods and materials, or warehousing uses. As such, the proposed project would not conflict with this land use policy.
Policy LU 2.3.4: Adequate public spaces and amenities shall be provided in a mixed-use development to support both commercial and residential uses, including but not limited to plazas, landscaped walkways, village greens, and greenbelts.	Consistent. In addition to commercial and residential uses, the proposed project includes 1.3 miles of pedestrian and bike trails, five acres of greenbelt open space, 2.9 acres of undeveloped open space, as well as other passive and active recreational spaces.
Policy LU 2.3.5: Mixed-use developments shall be designed to create a pedestrian-scale environment through appropriate street and sidewalk widths, block lengths, relationship of buildings to streets, and use of public spaces.	Consistent. The proposed project would be constructed in compliance with all applicable City and state regulations in regard to streets, sidewalks, buildings, and public access.
Policy LU 2.3.6: Provide parking alternatives in mixed-use developments, including subterranean parking and structured parking to limit the amount of surface area devoted to vehicle storage.	Consistent. Parking would be provided for the various uses throughout the project site. Parking would include surface parking lots as well as covered parking in the multifamily residential areas. Shared parking would be available for visitors to both the senior living component of the project and the multifamily residential component of the project.
Goal LU 3: Healthy and safe neighborhoods for all residents.	Partially Consistent. The proposed project would result in the development of mix of land uses, including residential, commercial, and recreational uses on a predominately vacant site. Implementation of the project and its potential impacts are analyzed throughout this EIR. As demonstrated in Section 4.2, Air Quality, project-related effects to nearby sensitive receptors (i.e., nearby residences) would be less than significant with mitigation measure MM-AQ-1 incorporated. Similarly, hazards-related effects to sensitive receptors would be less than significant, as further detailed in Section 4.8, Hazards and Hazardous Materials, of this EIR.
	The project would result in off-site improvements to the roadways surrounding the project site and adjacent neighborhoods. These improvements and their associated environmental impacts are analyzed in Section 4.16, Transportation. As shown, the project would not result in project design features incompatible with the surrounding area, and less than significant impacts are anticipated. Thus, the project would support this goal in creating safe neighborhoods for all residents. Similarly, as discussed in Section 4.19, Wildfire, project design features such as fuel modification zones would promote safety and compliance with existing regulations related to wildfire and

Table 4.10-2. General Plan Land Use Consistency Analysis

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Goals, Objectives, and Policies	Discussion associated hazards. With implementation of fire protection and prevention measures as outlined in MM-FIRE-1 through MM-FIRE-3, impacts related to wildfire would be less than significant. For more discussion on impacts related to wildfire, refer to Section 4.19, Wildfire. Given this, the project would support this goal with the incorporation of applicable mitigation measures.
Objective LU 3.1: Provide for a diversity of housing types available to provide safe and suitable homes for all economic levels, household sizes, age groups and special needs groups within the community.	Consistent. The proposed project would develop multifamily residential units. The units would consist of studios, 1-, 2-, and 3- bedroom apartments as well as loft style apartments. Additionally, the project would include a senior care center, which would include 130 independent living units, 61 assisted living units, and 26 memory care beds. Additionally, the proposed project would include improvements to enhance safety including off-site roadway and lighting improvements.
Policy LU 3.1.1: On the Land Use Map, designate adequate land for residential use at various densities to provide a mix of housing opportunities for all segments of the population, including attached, detached, senior, and mixed-use housing types, which are consistent with community character and meet the region's housing goals.	Consistent. As discussed in the analysis for Objective LU 3.1, proposed project would construct multifamily residential units of varying sizes, as well as a senior care facility that would provide housing for seniors of varying needs. The addition of these housing units would help the City to reach its housing needs. For further discussion on the project's contribution to the City's housing needs, refer to Section 4.13, Population and Housing.
Policy LU 3.1.2: Provide a mix of housing types within neighborhoods that accommodate households with varied income levels.	Consistent . As discussed in the analysis for Objective LU 3.1, the proposed project would construct multifamily residential units of varying sizes, as well as a senior care facility that would provide housing for seniors of varying needs. Additionally, the housing in the vicinity of the project (to the north and east) primarily consists of single-family residences. The addition of the proposed project would provide additional housing types in an area immediately adjacent to existing housing.
Policy LU 3.1.3: Promote opportunities for live-work units to accommodate residents with home-based businesses.	Not Applicable. The project would not include live-work units within the proposed development. Although the project's design does not include this housing type, the project would result in 379 multifamily residential units. As such, the project would not interfere with this policy.
Policy LU 3.1.4: Promote development of workforce housing to meet the needs of those employed in the Santa Clarita Valley.	Consistent. The proposed project would introduce 379 new multifamily residential units within the City, which would provide additional housing options for the employees that currently, or will in the future, work within the City.
Policy LU 3.1.5: Promote development of housing that is affordable to residents, including households with incomes in the very low, low, and moderate income classifications, through provision of adequate sites on the Land Use Map,	Not Applicable. This policy is directed for the City. Additionally, although the project would result in multifamily residential units on the project site, the project would not include income-restricted housing units nor would the applicant utilize the use of a density

Table 4.10-2. General Plan Land Use Consistency Analysis

Goals, Objectives, and Policies	Discussion
allowance for density bonuses and other development incentives.	bonuses or other development incentives. Implementation of the project would not inhibit the City from achieving this citywide policy.
Policy LU 3.1.6: Promote development of housing suitable to residents with special needs, including but not limited to senior citizens and persons with disabilities.	Consistent. The proposed project would construct a senior care facility that would include 130 independent living units, 61 assisted living units, and 26 memory care units for senior of varying needs levels.
Policy LU 3.1.7: Promote development of housing for students attending local colleges, in consideration of access to campuses to the extent practicable.	Consistent. The proposed project would construct 379 new multifamily residential units that would be accessible to the general population, including college students. The project site's proximity to transportation options, including the I-5 freeway as well as bus stops, would allow for easy access to college campuses.
Objective LU 3.2: Promote walkable neighborhoods that provide safe access to community services and essential services.	Consistent. The proposed project would include the development of 1.3 miles of pedestrian and bike trails as well as sidewalk and directional signage to promote the walkability of the project site and surrounding area. Additionally, the proposed project would include improvements to enhance safety including off-site roadway and lighting improvements. The project would also include services such as active and passive recreational facilities and commercial space.
Policy LU 3.2.1: Require provision of adequate walkways in urban residential neighborhoods that provide safe and accessible connections to destinations such as schools, parks, and neighborhood commercial centers.	Consistent. Refer to the analysis for Objective LU 3.2.
Policy LU 3.2.2: In planning residential neighborhoods, include pedestrian linkages, landscaped parkways with sidewalks, and separated trails for pedestrians and bicycles, where appropriate and feasible.	Consistent. Refer to analysis for Objective LU 3.2.
Objective LU 3.3: Ensure that the design of residential neighborhoods considers and includes measures to reduce impacts from natural or man-made hazards.	Consistent. The project site is located in VHFHSZ. As such, the project would include fire protection measures including fire access, a Conceptual Wildfire Evacuation Plan, and fuel modification which would reduce fire hazards around all structures. With implementation of fire protection and prevention measures as outlined in MM-FIRE-1 through MM-FIRE-3, impacts related to wildfire would be less than significant. For more discussion on impacts related to wildfire, refer to Section 4.19, Wildfire. The project site is also located in an area of high seismic activity. The project, however, would be designed in compliance with applicable California Building Code regulations. As such, impacts related to ground shaking and liquefaction would be less than significant. For further discussion on impacts related to geology and soils, refer to Section 4.6, Geology and Soils. The project site is also located in a Special Flood Hazard Area (SFHA). The

Table 4.10-2. General Plan Land Use Consistency Analysis

Goals, Objectives, and Policies	Discussion
	project, however, would include site modifications that would remove the site from the SFHA designation and related hazards. Per MM-HYD-1, the applicant would be required to demonstrate that the proposed site modifications would be sufficient in reducing the flood risk of the site. As such, flood hazard-related impacts would be reduced to a less-than-significant level. For further discussion on impacts related to hydrology and water quality, refer to Section 4.9, Hydrology and Water Quality. Additionally, the proposed project would include improvements to enhance safety including off-site roadway and lighting improvements.
Policy LU 3.3.1: Identify areas subject to hazards from seismic activity, unstable soils, excessive noise, unhealthful air quality, or flooding, and avoid designating residential uses in these areas unless adequately mitigated.	Consistent. Refer to the analysis for Objective LU 3.3.
Policy LU 3.3.2: In areas subject to wildland fire danger, ensure that land uses have adequate setbacks, fuel modification areas, and emergency access routes.	Consistent. The proposed project site is located in a VHFHSZ within a Local Responsibility Area. As such, the project would include fire protection measures including fire access, a Conceptual Wildfire Evacuation Plan, and fuel modification which would reduce fire hazards around all structures. With implementation of fire protection and prevention measures as outlined in MM-FIRE-1 through MM-FIRE-3, impacts related to wildfire would be less than significant. For more discussion on impacts related to wildfire, refer to Section 4.19, Wildfire.
Policy LU 3.3.3: Identify neighborhoods in which uses that pose a potential hazard to human health and safety may be over-concentrated, and address public safety through use of buffer areas, policies on siting decisions for such uses, changing land use designations, or other means as deemed appropriate.	Not Applicable. This policy is directed for the City and is not related to the development of the proposed project. The project site is bordered by I-5 to the west, residential uses to the north and east, and commercial uses to the south. These land uses are not typically deemed as having the potential to result in a hazard to human health and safety. The project site is located within a VHFHSZ which would pose as a risk to safety for the proposed project and surrounding communities. This EIR analyzes the potential impacts associated with fire hazards in Section 4.19, Wildfire. For more discussion, see Section 4.19 of this EIR.
Policy LU 3.3.4: Evaluate service levels for law enforcement and fire protection as needed to ensure that adequate response times are maintained as new residential development is occupied.	Consistent. The proposed project would increase the demand for public services including law enforcement and fire protection services. The applicant, however, would be required to pay development fees that would be used by the various public services to purchase equipment, personnel, and facility upgrades to ensure they are able to continue to provide an adequate level of service. For more discussion on project impacts related to public services, refer to Section 4.14, Public Services.

Table 4.10-2. General Plan Land Use Consistency Analysis

Goals, Objectives, and Policies	Discussion
Policy LU 3.3.5: Through the development review process, ensure that all new residential development is provided with adequate emergency access and that subdivision and site designs permit ready access by public safety personnel.	Consistent. The project would be constructed in compliance with all applicable regulations regarding emergency access and site design. The City would also review the proposed project's design during the development review process.
Policy LU 3.3.6: Ensure adequate street-lighting in all urban residential neighborhoods, as appropriate, for each community.	Consistent. The proposed project would be constructed in compliance with all applicable regulations regarding lighting, including those related to street lighting.
Policy LU 3.3.7: Ensure adequate addressing in all residential neighborhoods for emergency response personnel.	Consistent. See discussion for Policy LU 3.3.4.
Policy LU 3.3.8: Within multiple family residential projects comprised of multiple buildings, ensure that project designs include crime prevention measures such as delineating public and private open space, designs for defensible space, easy surveillance by residents of all outdoor and indoor common areas, lack of dead end aisles or paths, and similar measures.	Consistent. The proposed project would include a number of crime prevention measures such as adequate nighttime lighting, an entry kiosk with security gates at the main entrance of the multifamily residential area, and walls and fencing around portions of the project site. These measures would help to promote safety and reduce crime.
Objective LU 3.4: Encourage creation of pleasant neighborhoods that provide a high quality of life for residents.	Consistent. The proposed project would convert an underutilized, predominantly vacant site to residential, commercial, open space, and recreational uses. The project would a high quality of life for project residents as well as members of the public through the development of walking and biking trails, as well as passive and recreational facilities. The multifamily residents would also have access to additional amenities such as clubhouses, pools, and a fitness center. The senior living facility would include a garden, table and bench seating, faux turf, a pool and spa, and a barbecue area. The project would also include landscaping throughout each project component, which would including the planting of 450 total trees.
Policy LU 3.4.1: Promote the inclusion of green spaces, neighborhood parks, and other gathering places that allow neighbors to meet one another and encourage "eyes on the street" for safety purposes.	Consistent. The proposed project would include a number of recreational facilities including 1.3 miles of pedestrian and bike paths, open spaces, and other active and passive recreational spaces that could serve as gathering spaces for residents of the project site and nearby neighborhoods. Additionally, the project would incorporate a number of safety features that would reduce the potential for safety hazards and crime on the site and within the vicinity of the site, such as adequate nighttime lighting, an entry kiosk with security gates at the main entrance of the multifamily residential area, and walls and fencing around portions of the project site.

Table 4.10-2. General Plan Land Use Consistency Analysis

Goals, Objectives, and Policies	Discussion	
Policy LU 3.4.2: Ensure provision of street trees in urban residential areas where appropriate, to provide shade, comfort, and aesthetic enhancement.	Consistent. The project would include the planting of 450 trees. Many of these trees would be planted along streets, including Wiley Canyon Road and the interior streets of the project.	
Policy LU 3.4.3: Provide appropriate levels of code enforcement to ensure maintenance of neighborhoods in a clean, healthy, and safe condition.	Not Applicable. This policy is directed for the City and is not related to the development of the proposed project. The project would, however, be developed and maintained in accordance with all applicable regulations. Compliance with applicable regulations would be ensured through the City's plan check and permitting process.	
Policy LU 3.4.4: Within higher density housing developments, ensure provision of adequate recreational and open space amenities to ensure a high quality living environment.	Consistent. See discussion for Objective LU 3.4.	
Policy LU 3.4.5: Ensure compatibility between single family and multiple family residential developments through consideration of building height and massing, architectural treatment, connectivity, privacy, and other design considerations.	Consistent. As discussed in the analysis for Policy LU 2.2.1, the proposed project would not have a significant impact on the aesthetics of the area, nor would the project substantially obstruct the views of hillsides, mountains, and ridgelines within the project's area. The project's on- and off-site circulation improvements would also promote connectivity to the surrounding, single-family neighborhoods. The proposed project would also include privacy improvements, such as walls and fencing around portions of the project site, and an entry kiosk with security gates at the main entrance of the multifamily residential area.	
Policy LU 3.4.6: Promote mixed-density residential neighborhoods that are consistent with community character, and avoid over-development of high density multiple family units in any particular location.	Consistent. The proposed project would construct 379 new multifamily residential units. The residences surround the project site to the north and east predominantly consist of single-family homes. As such, the proposed project would promote mixed-density neighborhoods and would not over-develop one area with multifamily residences.	
Policy LU 3.4.7: Minimize the prominence of areas devoted to automobile parking and access in the design of residential neighborhoods.	Partially Consistent. The project, including the residential component, includes parking areas. These parking areas, however, are located in areas not devoted to the commercial, residential, and open space and are not the focal point of the project. These areas are meant only to provide access to the project. Furthermore, the project would provide access via alternative transportation modes through the development of on- and off-site pedestrian and bike trails.	
Policy LU 3.4.8: Require architectural design treatment along all sides of new housing to promote continuity of architectural scale and rhythm and avoid the appearance of blank walls (360 degree enhancement).	Consistent. The project is required to comply with the City's architectural design review and is subject to the provisions outlined in Municipal Code Section 17.55.040, Architectural Design Standards.	

Table 4.10-2. General Plan Land Use Consistency Analysis

Goals, Objectives, and Policies	Discussion
Policy LU 3.4.9: Encourage street cross-sections that locate landscaped parkways between the curb and the sidewalk to create a visually pleasing streetscape and provide pedestrian protection.	Consistent. The proposed project would include landscaping throughout the project site, including alongside its interior roads. Additionally, the project's off-site circulation improvements, including the roundabouts that would be located on Wiley Canyon Road, would contain landscaping features.
Goal LU 4: A diverse and healthy economy.	Consistent. The proposed project would result in the creation of approximately 90 jobs. Additionally, the addition of the project's housing units would help to City to reach its housing goal as the City continues to see expansion in population and employment.
Objective LU 4.1: Promote creation of strong regional and local economies.	Consistent. See response to Goal LU 4.
Policy LU 4.1.1: Promote expansion and enhancement of the Valencia Town Center to provide a focal point for cultural, civic, educational, and shopping activities serving the entire Santa Clarita Valley.	Not Applicable. The project site is not located within the Valencia Town Center. The project site is over 3 miles to the of this area. As such, the proposed project would not conflict with the implementation of this policy.
Policy LU 4.1.2: Promote creation of village commercial centers throughout the Santa Clarita Valley to meet the local and convenience needs of residents.	Not Applicable. The proposed project would result in the development of commercial space, however, the project does not involve the development of a commercial center. The proposed project would not conflict with the implementation of this policy.
Policy LU 4.1.3: Direct business creation and expansion for larger companies within and adjacent to existing and planned business centers and major transportation corridors.	Not Applicable. The proposed project involves the development of primarily residential and recreational space with minimal commercial space. Additionally, the proposed project is not located adjacent to existing or planned business centers. The project would not conflict with the implementation of this policy.
Policy LU 4.1.4: Promote economic opportunity for all segments of the community, including small businesses and new businesses.	Consistent. The proposed project would provide commercial space, as well as housing to the City. The project is also expected to result in the creation of approximately 90 jobs. The project's housing would help the City to meet its housing demands as the City continues to see growth in population and employment. For further discussion on the project's impacts on population, housing, and employment, refer to Section 4.13, Population and Housing.
Policy LU 4.1.5: Provide a clear and consistent planning and permitting process to encourage new development that conforms to the General Plan.	Not Applicable. This policy is directed toward the City. However, as demonstrated within this table and throughout this Draft EIR, the project's potential impacts related to General Plan goals, policies, and objectives are assessed, and implementation of the proposed project would not inhibit the City's process of achieving this policy.
Policy LU 4.1.6: Encourage the development of a range of child care services and facilities to serve the needs of working families, including public and private child care	Not Applicable. The proposed project does not involve the development of a child care service facility. The project would not conflict with this policy.

Table 4.10-2. General Plan Land Use Consistency Analysis

Goals, Objectives, and Policies	Discussion
centers, infant care, and after-school care, through supportive zoning regulations and permitting procedures.	
Objective LU 4.2: Promote job creation, focusing on employment generators in the technical and professional sectors.	Consistent . The proposed project would generate approximately 90 jobs. Although these jobs would not be focused on the technical and professional sectors, these jobs would be focused on senior care, including the provision of medical services, and the proposed project would not inhibit the City from implementing this objective.
Policy LU 4.2.1: Pursue business attraction and expansion programs for clean industries that provide job opportunities for local residents, particularly in the areas of film/entertainment, biotechnology, aerospace, and technology.	Not Applicable. This policy is directed for the City and is not related to the development of the proposed project. The project would involve the construction of residential, commercial, and recreational space, and would conflict with the implementation of this policy.
Policy LU 4.2.2: Achieve a balanced ratio of jobs to housing through business expansion and economic development programs, with a goal of at least 1.5 jobs per household.	Not Applicable. The proposed project would result in the development of primarily residential space with minimal commercial space. As further detailed in Section 4.13, Population and Housing, the project is anticipated to result in 379 multifamily residential units, and a senior care facility. In addition, approximately 90 jobs are anticipated to support the project's operations on site. For the purposes of this analysis, the proposed apartments are only considered in assessing the jobs to housing ratio given that the living spaces associated with the senior care facility are components of the senior care facility and are not accessible to all members of the public. As such, the project is proposed to be a housing-rich development.
	Under existing conditions, the City maintains a population of approximately 224,593 residents, and, according to the SCAG, the City contains approximately 91,725 total jobs (SCAG 2019). Thus, the City has a 0.4 jobs per household ratio under existing conditions. Although the housing-rich proposed project would not individually help the City achieve the desired 1.5 jobs per household ratio, the policy is directed at the City for implementation through business expansion and economic development programs, which are not applicable to the project.
Policy LU 4.2.3: Encourage businesses to locate in all appropriate areas of the community to encourage job creation in closer proximity to workforce housing.	Not Applicable. See discussion for Policy LU 4.2.2. The project site is also located in a developed area in close proximity to local businesses and the I-5 freeway. This policy is directed at the City for implementation. Furthermore, the project is consistent with the site's existing land use designation, and therefore, the project is not applicable to the implementation of this policy.

Table 4.10-2. General Plan Land Use Consistency Analysis

Goals, Objectives, and Policies	Discussion
Policy LU 4.2.4: Coordinate with local colleges to promote job training programs for Santa Clarita Valley residents.	Not Applicable. This policy is directed to the City and is not related to the development of the proposed project. The project would not conflict with the implementation of this policy.
Policy LU 4.2.5: Promote development of uses that create job opportunities for residents through the Santa Clarita Enterprise Zone and other business assistance programs as appropriate.	Consistent. The proposed project is located within the Santa Clarita Enterprise Zone (City of Santa Clarita 2022a) and would result in the creation of approximately 90 jobs.
Objective LU 4.3: Enhance older commercial and industrial areas.	Not Applicable. The proposed project is located on primarily vacant land with no previous commercial or industrial uses. The project would not conflict with the implementation of this policy.
Policy LU 4.3.1: Promote redevelopment in Old Town Newhall through construction of public improvements pursuant to the Downtown Newhall Specific Plan and future area planning efforts.	Not Applicable. The proposed project is not located in Old Town Newhall. The project site is located over 1.5 miles southeast of this area. As such, the proposed project would not conflict with the implementation of this policy.
Policy LU 4.3.2: Promote business development in Castaic and Val Verde to provide a greater range of goods and services to area residents.	Not Applicable. The project site is not located in Castaic or Val Verde. The project site is over 9 miles to the southeast of this Castaic and 7 miles southeast of Val Verde. As such, the proposed project would not conflict with implementation of this policy.
Policy LU 4.3.3: Promote revitalization of commercial uses along Sierra Highway between Soledad Canyon Road and Vasquez Canyon Road, to encourage businesses serving the Canyon Country neighborhoods and support services for the College of the Canyons east campus.	Not Applicable. The project site is not located along Sierra Highway. The project site is located over 8 miles southwest of this area. As such, the proposed project would not conflict with the implementation of this policy.
Policy LU 4.3.4: Promote business development that upgrades and revitalizes older commercial corridors, including Lyons Avenue, Railroad Avenue/Newhall Avenue, Main Street and Soledad Canyon Road, in a manner that reflects each area's character, architecture, and history.	Not Applicable. The project site is not located in a commercial corridor, nor is it located along any of the streets identified in this policy. As such, the proposed project would not conflict with the implementation of this policy.
Policy LU 4.3.5: Coordinate with property owners and environmental agencies, and provide assistance as appropriate, to promote clean up and redevelopment of the Whittaker Bermite property as a business and employment center.	Not Applicable. The proposed project site is not located on the Whittaker Bermite property. The project site is over 2.5 miles southwest of this property. As such, the proposed project would not conflict with the implementation of this policy.

Table 4.10-2. General Plan Land Use Consistency Analysis

Goals, Objectives, and Policies	Discussion
Policy LU 4.3.6: Coordinate with property owners and environmental agencies, and provide assistance as appropriate, to promote clean up and remediation of oil fields west of State Route 14.	Not Applicable. The proposed project is not located in the vicinity of State Route 14. As such, the proposed project would not conflict with the implementation of this policy.
Policy LU 4.3.7: Promote revitalization and reuse of the older industrial areas east of the railroad, adjacent to the intersection of Springbrook and Drayton Avenues and in the Honby area adjacent to the Santa Clara River.	Not Applicable. The proposed project is not located in an industrial area, nor is the project site located in any of the areas described in this policy. As such, the proposed project would not conflict with the implementation of this policy.
Objective LU 4.4: Expand infrastructure to attract and sustain new business.	Consistent. The proposed project would improve and expand upon the existing on-site public utility infrastructure to accommodate the residences, senior care facility, commercial space, and ancillary structures.
Policy LU 4.4.1: Promote extension of state-of-the-art communication facilities to serve commercial and industrial areas, including fiber optic cable, telecommunication facilities, and other technology as deemed appropriate.	Not Applicable. The proposed project is not located in a commercial or industrial area. As such, the proposed project would not conflict with the implementation of this policy.
Policy LU 4.4.2: Improve flood control facilities along Sierra Highway north of Soledad Canyon Road to allow increased use of this corridor for business and employment uses.	Not Applicable. The project site is not located along Sierra Highway. The project site is located over 8 miles southwest of the area along Sierra Highway north of Soledad Canyon Road. As such, the proposed project would not conflict with the implementation of this policy.
Policy LU 4.4.3: Evaluate the feasibility of connecting business activity centers throughout the Santa Clarita Valley with light rail, to provide increased mobility and access for customers and employees between the Valencia Town Center, Whittaker Bermite property, Newhall, Valencia Industrial Center, Magic Mountain and Entrada, Newhall Ranch, and other areas as deemed appropriate.	Not Applicable. This policy is directed for the City and is not related to the implementation the proposed project. The proposed project would not conflict with the implementation of this policy.
Policy LU 4.4.4: Protect and enhance public utility facilities as necessary to maintain the safety, reliability, integrity, and security of essential public service systems for all Valley residents.	Consistent. See response to Objective LU 4.4. As described in Section 4.14, Public Services, development of the proposed project would not have a significant impact relative to public services. As described in Section 4.18, Utilities and Service Systems, the proposed project would be served by existing utilities and would not result in a significant impact relative to utilities and service systems.
Objective LU 4.5: Ensure creation of attractive and technology-friendly business environments to attract tenants and employees.	Not Applicable. The proposed project does not involve the construction of business facilities. The proposed project would not conflict with the implementation of this objective.

Table 4.10-2. General Plan Land Use Consistency Analysis

Goals, Objectives, and Policies	Discussion
Policy LU 4.5.1: Promote inclusion of employee amenities in the workplace, including but not limited to outdoor seating and break areas, child care services, wellness facilities, and facilities for bicycle commuters, including bike lockers and showers where appropriate.	Consistent. The proposed project would include a number of amenities available to employees for recreation, social gathering and/or breaks, including outdoor seating, pedestrian and bike trails, and open space.
Policy LU 4.5.2: Encourage the provision of usable open space that is accessible to employees and visitors, and discourage the provision of large areas of water-consuming landscaping that are not usable or accessible.	Consistent. The proposed project would include a 50,600 square-foot passive recreational pad, 1.3 miles of pedestrian and bike trails, 5 acres of green belt open space, and 2.9 acres of undeveloped open space. Additionally, per Chapter 17.51 of the City's Unified Development Code (UDC), the project's landscape design would be required to emphasize drought-tolerant and/or native species.
Policy LU 4.5.3: Promote the inclusion of state-of-the-art technology within business complexes for telecommunications, heating and cooling, water and energy conservation, and other similar design features.	Not Applicable. The proposed project does not involve the construction of a business complex. The proposed project would not conflict with the implementation of this policy.
Policy LU 4.5.4: Encourage the provision of support services for employees within business park areas, such as dining and personal services where appropriate, to reduce vehicle trips and promote pedestrian-friendly work environments.	Not Applicable. See discussion for Policy LU 4.5.3.
Goal LU 5: Enhanced mobility through alternative transportation choices and land use patterns.	Consistent. See response to Policy LU 4.5.2.
Objective LU 5.1: Provide for alternative travel modes linking neighborhoods, commercial districts, and job centers.	Consistent. The proposed project would include a number of circulation improvements including 1.3 miles of 16-foot-wide pedestrian and biking trails that would connect the project site to surrounding areas of the City. There are also existing nearby transit service, including bus lines, which would provide easy access to jobs and other commercial areas in the City and greater Los Angeles area. Furthermore, project improvements would include bus bays from the northern boundary of the project site to Calgrove Boulevard.
Policy LU 5.1.1: Require safe, secure, clearly-delineated, adequately-illuminated walkways and bicycle facilities in all commercial and business centers.	Consistent. The proposed project would be designed consistent with the City's Outdoor Lighting Standards (UDC Section 17.51.050) and would thus provide safe, secure, clearly delineated, and adequately illuminated walkways and bicycle facilities.
Policy LU 5.1.2: Require connectivity between walkways and bikeways serving neighborhoods and nearby commercial areas, schools, parks, and other supporting services and facilities.	Consistent. The proposed project is not in close proximity to commercial and business centers. However, 1.3 miles of on-site publicly accessible pedestrian and bike trails would ensure that connectivity is prioritized between different aspects of the project and that sufficient accessibility is provided throughout the project site and surrounding areas.

Table 4.10-2. General Plan Land Use Consistency Analysis

Goals, Objectives, and Policies	Discussion
Policy LU 5.1.3: Ensure that adequate bus turnouts, served by walkways and comfortable, safe, and convenient waiting facilities, are provided for transit users within residential, shopping, and business developments.	Consistent. There are existing bus stops in the vicinity of the project site, including one located less than 900 feet northeast of the project site and one located less than 650 feet southeast of the project site. The proposed project would also involve the construction of new bus bays from the northern boundary of the project site to Calgrove Boulevard.
Objective LU 5.2: Coordinate land use designations with support services and public transit in order to encourage vehicle trip reduction.	Consistent . See response to Objective LU 5.1. The project's circulation improvements would help to encourage vehicle trip reduction.
Policy LU 5.2.1: Designate higher-density residential uses in areas served by public transit and a full range of support services.	Consistent. The proposed project would involve the development of multifamily residential buildings within the City. In addition to the existing bus stops in the vicinity of the site, the project would involve the development of new bus bays to serve the proposed project and surrounding residents. The project site is also within the service area of Los Angeles County Fire Department, Los Angeles County Sheriff's Department, local school districts, and the City's library system. Furthermore, the proposed project would include active and passive recreational improvements that would serve the project site in addition to the public park facilities near the project site. For further discussion on the public services that would serve the project site, refer to Section 4.14, Public Services.
Policy LU 5.2.2: Provide for location of neighborhood commercial uses in proximity to the neighborhoods they serve, to encourage cycling and walking to local stores.	Consistent. The proposed project would include 8,914 square feet of commercial space in close proximity to 379 new multifamily residential units and a senior care facility. The project would also include the development of 1.3 miles of pedestrian and bike trails throughout the project site and surrounding area.
Policy LU 5.2.3: Promote location of non-polluting businesses providing employment opportunities in proximity to neighborhoods, to encourage walking to work.	Consistent. The proposed project would result in the creation of approximately 90 jobs to serve the senior care facility, as well as the commercial and residential portions. These facilities would not result in substantial amount of pollution during their operation. The project site is located in close proximity to residential neighborhoods and would also include the development of 1.3 miles of pedestrian and biking trails.
Policy LU 5.2.4: Encourage transit-oriented development (TOD) through designation of land uses that allow compact, mixed-use development in proximity to rail stations and multi-modal transit facilities, in conformance with applicable policies.	Not Applicable. This policy is directed toward the City. The proposed project would, however, involve the development of a mix of uses on the project site. This includes multifamily residential apartment buildings, a senior care facility, as well as commercial and recreational space. As previously discussed, the project site would include the construction of bus bays at the northern boundary of the project site to Calgrove Boulevard. However, the proposed project is not considered a transit-oriented

Table 4.10-2. General Plan Land Use Consistency Analysis

Goals, Objectives, and Policies	Discussion
	development and not within the immediate proximity of a rail station. As such, the proposed project would not conflict with the City's implementation of this policy.
Policy LU 5.2.5: Encourage the mix of compatible uses in areas where, though not served by rail or transit, mixed uses will achieve more walkable neighborhoods and trip reduction, in conformance with applicable policies.	Consistent. The proposed project includes the development of a mix of uses including multifamily residential units, a senior care facility, as well as commercial and recreational space. The project also includes circulation improvements including 1.3 miles of pedestrian and biking trails, which would encourage walking and trip reduction for employees and residents of the project site, as well as residents of surrounding neighborhoods.
Goal LU 6: A scenic and beautiful urban environment that builds on the community's history and natural setting.	Consistent. See response to Objective LU 1.2.
Objective LU 6.1: Maintain the natural beauty of the Santa Clarita Valley's hillsides, significant ridgelines, canyons, oak woodlands, rivers and streams.	Partially Consistent. The proposed project would not result in impacts to hillsides, ridgelines, or canyons. The project site and surrounding area currently support 36 oak trees, 4 of which would be removed as a result of the project and another 19 may be encroached upon. The removal of these oak trees would require an Oak Tree permit from the City, which would likely require on- or off-site oak tree replacement at a ratio that is based upon the diameter of the trunk of each tree removed. The remaining oak trees would be protected through the installation of protective fencing at least five feet in height at the limits of their tree protection zone. The fencing would remain in place throughout all construction activities and would be removed only after a certified arborist verifies that it is appropriate to be removed. Pursuant to the City's Oak Tree Preservation Ordinance, impacts to oak trees would be less than significant.
	The project site also supports 1.081 acres (3,209 linear feet) of federally and state protected waters which may be impacted by the proposed project. The implementation of MM-BIO-5, however, would require on- or off-site enhancement of protected waterways and aquatic resources at a ratio of at least 2:1 for permanent impacts and the restoration of impacted areas to pre-project conditions for temporary impacts. For further discussion on the project's impacts to biological resources, refer to Section 4.3, Biological Resources.
Policy LU 6.1.1: Designate ridgelines throughout the planning area, and preserve these ridgelines from development by encouraging a minimum distance for grading and development from these ridgelines of 50 feet, or more, if determined preferable by the reviewing authority based on site conditions.	Not Applicable. This policy is directed to the City for implementation. The proposed project would not result in impacts to ridgelines, as further discussed in Section 4.1, Aesthetics. As such, the project would not conflict with the City's implementation of this policy.

Table 4.10-2. General Plan Land Use Consistency Analysis

Goals, Objectives, and Policies	Discussion
Policy LU 6.1.2: On the Land Use Map, designate publicly owned portions of the Santa Clara River corridor and its major tributaries, as Open Space.	Not Applicable. This policy is directed to the City for implementation. The project site is located near the South Fork of the Santa Clara River. However, at the project site is located over 3.5 miles south of Santa Clara River corridor. Furthermore, the project site is designated as Mixed Use – Neighborhood and not Open Space. As such, the project would not conflict with the City's implementation of this policy.
Policy LU 6.1.3: Ensure that new development in hillside areas is designed to protect the scenic backdrop of foothills and canyons enjoyed by Santa Clarita Valley communities, through requiring compatible hillside management techniques that may include but are not limited to clustering of development; contouring and landform grading; revegetation with native plants; limited site disturbance; avoidance of tall retaining and build-up walls; use of stepped pads; and other techniques as deemed appropriate.	Not Applicable. The proposed development on project site is not located in a hillside area. As such, the proposed project would not conflict with the implementation of this policy.
Objective LU 6.2: Provide attractive public and open spaces in places visited by residents and visitors, where feasible and appropriate.	Consistent. The proposed project includes several publicly accessible outdoor recreational improvements, including a 50,600 square-foot passive recreational pad, 1.3 miles of pedestrian and bike trails, 5 acres of greenbelt open space, and 2.9 acres of undeveloped open space.
Policy LU 6.2.1: Promote the inclusion of plazas, courtyards, seating areas, public art, and similar features within commercial centers, business parks, and civic facilities visited by the general public.	Not Applicable. The proposed project does not involve the development of a commercial center, business park, or civic facility. As such, the project would not conflict with the implementation of this policy.
Policy LU 6.2.2: Provide and enhance trail heads where appropriate with landscaping, seating, trash receptacles and information kiosks.	Consistent. In addition to the 1.3 miles of pedestrian and bike trails, the proposed project's improvements would include drought-tolerant landscaping and outdoor table and bench seating.
Objective LU 6.3: Beautify streetscapes and gateways to the community.	Consistent. The proposed project would include a number of aesthetic-related improvements along roadways including drought-tolerant landscaping, street trees, and street lighting.
Policy LU 6.3.1: Promote planting of street trees throughout urban areas in the Santa Clarita Valley.	Consistent. See response to Objective LU 6.3.
Policy LU 6.3.2: Develop compatible landscape plans for major arterials traversing the Santa Clarita Valley, including landscaped medians and parkways, and implement these	Not Applicable. This policy is directed to the City. However, the proposed project would include off-site infrastructure improvements to Wiley Canyon Road and adjacent cross streets. Such improvements would involve landscaping within medians and parkways, as

Table 4.10-2. General Plan Land Use Consistency Analysis

Goals, Objectives, and Policies	Discussion
plans in both City and County areas, where feasible and appropriate based on right of way and other conditions.	applicable and feasible. As such, the project would not conflict with the City's implementation of this policy.
Policy LU 6.3.3: Enhance major entrance points to the community, including on and off ramps from Interstate 5 and State Route 14; entrances along State Route 126; and at the northern and southern entrance points on Sierra Highway, where feasible and appropriate.	Not Applicable. The proposed project does not involve the construction of improvements associated with a major entrance point to the community. Although the project would involve off-site improvements to Wiley Canyon Road and associated intersections, such as on Calgrove Boulevard, the project would not result in changes to the on and off ramps from I-I-5. As such, the project would not conflict with the implementation of this policy.
Policy LU 6.3.4: Require undergrounding of utility lines for new development where feasible, and plan for undergrounding of existing utility lines in conjunction with street improvement projects where economically feasible.	Consistent . Existing power poles and overhead electric lines would be removed along the western boundary of the site adjacent to the I-5 freeway, with the exception of select power poles and overhead lines at the southern end of the site adjacent to the proposed drainage basin, and updated, underground electrical lines would be installed.
Policy LU 6.3.5: Restrict the establishment of billboards within the planning area.	Not Applicable. The proposed project does not involve the development of billboards. As such, the proposed project would not conflict with the implementation of this policy.
Objective LU 6.4: Protect the Santa Clarita Valley's significant historical and cultural resources in a scenic setting through appropriate land use designations.	Consistent. See response to Policy LU 3.4.7. Additionally, as discussed in Section 4.1, Aesthetics, the project would result in a less than significant impact on the scenic resources of the area.
Policy LU 6.4.1: Maintain the historic buildings in Newhall, including the William Hart Regional Park buildings, the Tom Mix cottages at Heritage Junction, the American Theater, the Melody Ranch, and various other commercial and residential structures designated as local historic resources, through implementation of preservation measures in the Downtown Newhall Specific Plan.	Consistent. The project site is located within the Newhall area of Santa Clarita. However, as further described in Section 4.4, Cultural Resources, the project site does not contain historically significant buildings on site. Furthermore, this policy identifies specific historic resources within the Old Town Newhall area and the project would not result in impacts to those sites.
Policy LU 6.4.2: Enhance the area around historic Lang Station by requiring a Specific Plan for redevelopment of this area.	Not Applicable. The project site is not located in the vicinity of the Lang Station. The project site is located over 10 miles southwest of this historic station. As such, the proposed project would not conflict with the implementation of this policy.
Policy LU 6.4.3: Maintain cultural resources from pre- historical Native American habitation and historical settlement in the areas around Vasquez Rocks, Elsmere Canyon, and along the Santa Clara River, through designation of these areas as Open Space on the Land Use Map.	Not Applicable. The project site is not located near any of the historic sites described in this policy. As such, the proposed project would not conflict with the implementation of this policy.

Table 4.10-2. General Plan Land Use Consistency Analysis

Goals, Objectives, and Policies	Discussion
Policy LU 6.4.4: Maintain the historic site of Mentryville by designating the site as Open Space on the Land Use Map.	Not Applicable. The proposed project would not involve development near the Mentryville historic site. The project site is over 3 miles southeast of this historic site. As such, the proposed project would not conflict with the implementation of this policy.
Policy LU 6.4.5: Maintain the historic area of the Rancho San Francisco Estancia through implementation of preservation measures in the Newhall Ranch Specific Plan.	Not Applicable. The proposed project would not involve development near Rancho San Francisco Estancia. The project site located over 5 miles southeast of this historic area. As such, the project would not conflict with the implementation of this policy.
Policy LU 6.4.6: Through the environmental review and development review processes, evaluate impacts on historic and cultural sites from proposed development and require appropriate mitigation.	Consistent. The proposed project would comply with the regulations outlined in CEQA pertaining to the evaluation of historic and cultural resources. For further discussion on project impacts related to cultural and tribal cultural resources, refer to Section 4.4, Cultural Resources, and Section 4.17, Tribal Cultural Resources.
Objective LU 6.5: Promote high quality development that enhances the urban environment and builds long-term value.	Consistent. The proposed project would introduce 379 new multifamily residential units, a senior care facility, and commercial and recreational space, all of which would provide long-term value in the community. The project would also be subject to the City's Development and Architectural Design Review.
Policy LU 6.5.1: Require use of high quality, durable, and natural-appearing building materials pursuant to applicable ordinances.	Consistent. The project site would be designed consistent with all applicable development standards set forth by the City and would have to be approved through the City's development review process.
Policy LU 6.5.2: Encourage the use of designs and architectural styles that incorporate classic and timeless architectural features.	Consistent. See response to Policy LU 6.5.1.
Policy LU 6.5.3: Require architectural enhancement and articulation on all sides of buildings (360 degree architecture), with special consideration at building entrances and corners, and along facades adjacent to major arterial streets.	Consistent. The proposed project would include architectural elements such as large entry arches with stone veneer, large windows, clay roof tiles, metal railings, and neutral-colored stucco, which would serve to create architecturally enhanced buildings that are compatible with the rural, rustic design of the surrounding area consistent with the City's Design Guidelines.
Policy LU 6.5.4: Evaluate new development in consideration of its context, to ensure that buildings create a coherent living environment, a cohesive urban fabric, and contribute to a sense of place consistent with the surrounding neighborhoods.	Consistent. See response to Policy LU 6.5.1 and Objective LU 6.5.
Goal LU 7: Environmentally responsible development through site planning, building design, waste reduction, and responsible stewardship of resources.	Consistent. The proposed project would adhere to the California Green Building Standards Code (CALGreen), which would ensure environmentally responsible development. As described in Chapter 3, Project Description, of this EIR, the project

Table 4.10-2. General Plan Land Use Consistency Analysis

Goals, Objectives, and Policies	Discussion
	would incorporate sustainability features, including energy-efficient appliances and water-efficient appliances, water fixtures, and irrigation systems.
Objective LU 7.1: Achieve greater energy efficiency in building and site design.	Consistent. See response to Goal LU 7.
Policy LU 7.1.1: Require shade trees within parking lots and adjacent to buildings to reduce the heat island effect, in consideration of Fire Department fuel modification restrictions.	Consistent. The proposed project would include landscaping in and around surface parking areas. Additionally, the project's landscaping plans would be submitted to the City for approval prior to the issuance of any grading permits and would be subject to applicable fuel modification requirements. For further discussion on the project's fuel modification plan, refer to Section 4.19, Wildfire.
Policy LU 7.1.2: Promote the use of solar panels and renewable energy sources in all projects.	Consistent . Although the proposed project would not result in the use of solar panels on site, the project would result in the incorporation of sustainability features, including energy-efficient appliances and water-efficient appliances, water fixtures, and irrigation systems. See response to Goal LU 7 for more analysis.
Policy LU 7.1.3: Encourage development of energy-efficient buildings, and discourage construction of new buildings for which energy efficiency cannot be demonstrated.	Consistent. See response to Goal LU 7.
Policy LU 7.1.4: Support the establishment of energy-efficient industries in the Santa Clarita Valley.	Not Applicable. The proposed project does not involve the construction of industry-supporting structures. The project would not conflict with the implementation of this policy.
Objective LU 7.2: Ensure an adequate water supply to meet the demands of growth.	Consistent. The Santa Clarita Valley Water Agency has determined that the project's anticipated water demand would be adequately met by the agency (Appendix L).
Policy LU 7.2.1: Monitor growth, and coordinate with water districts as needed to ensure that long-range needs for potable and reclaimed water will be met.	Consistent. See response to Objective LU 7.2.
Policy LU 7.2.2: If water supplies are reduced from projected levels due to drought, emergency, or other unanticipated events, take appropriate steps to limit, reduce, or otherwise modify growth permitted by the General Plan in consultation with water districts to ensure adequate long-term supply for existing businesses and residents.	Consistent. See response to Objective LU 7.2.
Policy LU 7.2.3: Require that all new development proposals demonstrate a sufficient and sustainable water supply prior to approval.	Consistent. See response to Objective LU 7.2.

Table 4.10-2. General Plan Land Use Consistency Analysis

Goals, Objectives, and Policies	Discussion
Objective LU 7.3: Protect surface and ground water quality through design of development sites and drainage improvements.	Consistent. As explained in Section 4.9, Hydrology and Water Quality, the proposed project would be subject to a Stormwater Pollution Prevention Plan (SWPPP), which would protect water quality during construction. Water quality/detention basins would be constructed as part of the project, in order to enhance water quality and reduce stormwater runoff flow rates and volumes during operation. Required low impact development features would further ensure that surface and groundwater quality are protected with project implementation.
Policy LU 7.3.1: Promote the use of permeable paving materials to allow infiltration of surface water into the water table.	Consistent. The project would incorporate permeable paving materials where feasible. Additionally, as described in Section 4.9, Hydrology and Water Quality, while the development of hardscapes and buildings would result in a decrease in pervious surfaces on the site, the project would include the construction of three drainage detention basins that would allow the majority of the runoff to infiltrate onsite. Additionally, the project would include a number of unpaved components, including a 50,600 square-foot recreational pad, five acres of green belt open space, and 128,659 square feet of undeveloped space.
Policy LU 7.3.2: Maintain stormwater runoff onsite by directing drainage into rain gardens, natural landscaped swales, rain barrels, permeable areas, and use of drainage areas as design elements, where feasible and reasonable.	Consistent . During operations, the project site would consist of vegetated open space, landscaped areas, buildings, and hardscapes. All stormwater flows would be directed to storm drain features and water quality/detention basins. Also see response to Objective LU 7.3.
Policy LU 7.3.3: Seek methods to decrease impermeable site area where reasonable and feasible, in order to reduce stormwater runoff and increase groundwater infiltration, including use of shared parking and other means as appropriate.	Consistent. See responses to Policy LU 7.3.1 and Policy LU 7.3.2.
Policy LU 7.3.4: Implement best management practices for erosion control throughout the construction and development process.	Consistent. During construction of the project, a SWPPP and associated best management practices would be implemented. The SWPPP would include standard construction methods to control on-site and off-site erosion. Additionally, the proposed project would be designed in compliance with Section 402(p) of the Clean Water Act, which mandates that municipal separate stormwater sewer system discharges to surface waters be regulated by a National Pollution Discharge and Elimination System permit. Also see response to Objective LU 7.3 and Policy 7.3.2.
Policy LU 7.3.5: Limit development within flood-prone areas to minimize downstream impacts.	Partially Consistent. As stated in Section 4.9, Hydrology and Water Quality, the project site is located in a SFHA. As such, the project could be subject to flood hazards. However, with appropriate site modifications and the implementation of MM-HYD-1 site

Table 4.10-2. General Plan Land Use Consistency Analysis

Goals, Objectives, and Policies	Discussion
	modifications would be incorporated to decrease flood risk and remove the SFHA designation. As such, impacts related to flood risk would be less than significant.
Objective LU 7.4: Promote water conservation through building and site design.	Consistent. The proposed project would adhere to CALGreen, a statewide building code that lays out minimum requirements for development projects in California. CALGreen ensures that new development meets specific sustainability standards during construction and operation, including water conservation standards. The City's Green Building Standards Code adopts CALGreen by reference. Per Chapter 17.51 of the City's UDC, the project's landscape design would be required to emphasize drought-tolerant and/or native species.
Policy LU 7.4.1: Require the use of drought tolerant landscaping, native California plant materials, and evapotranspiration (smart) irrigation systems.	Consistent. See response to Objective LU 7.4.
Policy LU 7.4.2: Require the use of low-flow fixtures in all non-residential development and residential development with five or more dwelling units, which may include but are not limited to water conserving shower heads, toilets, waterless urinals and motion-sensor faucets, and encourage use of such fixtures in building retrofits as appropriate.	Consistent . See response to Objective LU 7.4. The proposed project would be designed in adherence to CALGreen, which includes requirements for water-conserving plumbing fixtures and fittings.
Objective LU 7.5: Promote waste reduction through site and building design.	Consistent. See response to Policy LU 7.4.2.
Policy LU 7.5.1: Ensure that all new development provides adequate space for recycling receptacles and bins on site.	Consistent. The proposed project would include sufficient recycling receptacles and bins on site.
Policy LU 7.5.2: Promote the use of recycled building materials.	Consistent. The project would incorporate recycled building materials into the design where feasible.
Objective LU 7.6: Protect natural habitats through site design where reasonable and feasible.	Partially Consistent. The proposed project includes the redevelopment of an underutilized, previously disturbed site. Impacts to natural habitats would be reduced to a less-than-significant level through implementation of MM-BIO-1 through MM-BIO-5, as outlined in Section 4.3, Biological Resources. The project would be designed to retain several exiting natural features on the site to the extent feasible. For example, the project's design would avoid 22 on-site oak trees, and 2.9 acres of the project site would remain undeveloped open space.

Table 4.10-2. General Plan Land Use Consistency Analysis

Goals, Objectives, and Policies	Discussion
Policy LU 7.6.1: Limit outdoor lighting levels to the minimum needed for safety and security, and encourage lower lighting levels when businesses are closed.	Consistent. The proposed project would be designed consistent with the City's Outdoor Lighting Standards (SCMC Section 17.51.050), which establish requirements such as light shielding and automatic time switch controls to ensure that on-site lighting is sufficient but does not cast light and glare on surrounding land uses.
Policy LU 7.6.2: Preserve habitat connectivity in site planning where feasible, and discourage the creation of open space islands surrounded by paving.	Partially Consistent. The proposed project would be located on previously disturbed land and is surrounded on all sides by development including I-5 to the west, residential uses to the north, Wiley Canyon Road and residential uses to the east, and commercial uses to the south. As stated in Section 4.3, Biological Resources, the project site is not within an area that has been identified as important to wildlife movement, such as a regional-scale habitat linkage or a wildlife movement corridor. The project would, however, affect sensitive plant communities and special status wildlife species. Through the implementation of MM-BIO-4 and MM-BIO-5, these impacts would be reduced to a less-than-significant level. For further discussion on the project's impacts to biological resources, refer to Section 4.3.
Policy LU 7.6.3: Protect wildlife corridors through site design and appropriate land use designations, including mapped corridors and other corridors that may be identified through biological surveys.	Consistent. See response to Policy LU 7.6.2.
Policy LU 7.6.4: Encourage site designs that protect oak trees, hillsides, and biological resources through creative solutions.	Consistent. The proposed project site and surrounding area contains 36 oaks trees. Although a total of 4 oak trees would be removed to accommodate project implementation and 19 would be impacted by encroachments, compliance with the required Oak Tree Permit would ensure that the trees are either replaced on site or that funding is provided for the City' Oak Tree Fund. Furthermore, see responses to Objective LU 6.1 and Objective LU 7.6.
Objective LU 7.7: Protect significant mineral resources, natural gas storage facilities, and petroleum extraction facilities from encroachment by incompatible uses.	Consistent. The project site is designated as MRZ-3, which is defined as an area containing mineral deposits, the significance of which cannot be evaluated from available data. The project site does not contain existing mineral resource extraction activities under existing conditions. Although the presence of mineral resources cannot be determined, the project site's existing and future operations would not result in the loss of availability of known mineral resources. Additionally, as described in Section 4.11, Mineral Resources, mineral extraction activities are not currently permitted on the project site under existing conditions. Therefore, given the lack of availability of known resources and existing and proposed conditions, the proposed project would result in less-than-significant impacts to mineral resources. For further discussion, refer to Section 4.11 of this EIR.

Table 4.10-2. General Plan Land Use Consistency Analysis

Goals, Objectives, and Policies	Discussion
Policy LU 7.7.1: Maintain a suitable distance and/or provide buffering to separate aggregate mining and processing activities from nearby residential uses and other uses with sensitive receptors to noise and airborne emissions.	Not Applicable. There are no mineral extraction activities currently occurring on the project site or its vicinity, nor would there be under project conditions as described in the response to Objective LU 7.7. Therefore, the proposed project would not conflict with the implementation of this policy.
Policy LU 7.7.2: Avoid designating land uses in areas with significant mineral resources or utility facilities that would preclude the future extraction and use of those resources and facilities.	Not Applicable. Refer to the response to Objective LU 7.7. The significance of the mineral resources on the project site are unknown and cannot be evaluated from available data. There are also no utility facilities, such as an electrical substation, on the site. As such, the proposed project would not conflict with the implementation of this policy.
Policy LU-7.3.6: Support emerging methods and technologies for the onsite capture, treatment, and infiltration of stormwater and greywater, and amend the City Code to allow these methods and technologies when they are proven to be safe and feasible.	Consistent. Refer to response to Objective LU 7.3.
Policy LU 7.7.3: Encourage the operators of existing surface mines to consider an end use site restoration plan that will result in land use conversions to aide in implementing the jobs-housing balance policies, economic vitality goals and policies, and which will reinforce the image of the Santa Clarita Valley as an ecoconscious community.	Not Applicable. The proposed project does not involve matters related to surface mining. The project would not conflict with the implementation of this policy.
Objective LU 7.8: Protect significant woodlands, heritage oak trees, and other biological resources from the impacts of development.	Consistent. See responses to Objective LU 7.6, Policy LU 7.6.2, and Policy LU 7.6.4.
Policy LU 7.8.1: Adopt and implement consistent policies for protection of oak woodlands and oak trees throughout the planning area.	Consistent. See response to Policy LU 7.6.4.
Policy LU 7.8.2: Protect all designated Significant Ecological Areas (SEA's) from incompatible development.	Not Applicable. The project site is not located within a Significant Ecological Area; see Section 4.3, Biological Resources, of this EIR.
Goal LU 8: Equitable and convenient access to social, cultural, educational, civic, medical, and recreational facilities and opportunities for all residents.	Consistent. The proposed project is located within the City of Santa Clarita, which offers access to social, cultural, educational, medical, and recreational facilities. The area around the project site is served by City of Santa Clarita Transit (SCT) Routes 4, 5, 6, and 14. These routes stop at the intersection of Wiley Canyon Road and Lyons Avenue, just over a half mile north of the project site. There are other transit facilities in the City of Santa Clarita that can be accessed through these routes to provide regional access to

Table 4.10-2. General Plan Land Use Consistency Analysis

Goals, Objectives, and Policies	Discussion
	and from the project site. These facilities include the Newhall Metrolink station and the McBean Regional Transit Center. Furthermore, SCT provides additional service trips during peak student travel times with two routes traveling along Wiley Canyon Road between Lyons Avenue and Calgrove Boulevard. On school days, Route 634 provides service to West Ranch High School and Rancho Pico Junior High School, and Route 641 provides service to Hart High School and Placerita Junior High School. As part of the proposed project, new bus bays would be installed from the northern boundary of the project site to Calgrove Boulevard. This would help to ensure that residents of the project would have access to all required services and opportunities.
	The proposed project would also include a number of recreational and open space amenities that would allow for social gathering for the project's residents and members of the public. Refer to the response for Objective LU 6.2 for further discussion on the project's proposed recreational amenities.
Objective LU 8.1: Work with service providers to plan for adequate community facilities and services to meet the needs of present and future residents.	Consistent. As discussed in Section 4.14, Public Services, the proposed project would have a less-than-significant impact on the City's public services. Pursuant to Section 17.51.010 of the City's Development Code and Senate Bill 50, the project's applicant would be required to pay Development Impact Fees to the various public services in the City to ensure that these services will continue to be provided to the City at an adequate level under project conditions. For further discussion on the project's impacts to public services, refer to Section 4.14.
Policy LU 8.1.1: Coordinate plans for new residential development with affected school districts to ensure adequate mitigation of impacts on school facilities; provision of facilities and programs to promote academic excellence for Santa Clarita Valley students; coordination on joint use of facilities and transportation; and long-range planning.	Consistent. See response to Objective LU 8.1.
Policy LU 8.1.2: Implement a master plan for trails throughout the Santa Clarita Valley to serve all residents.	Not Applicable. This policy is directed for the City. The proposed project would not conflict with the City's implementation of this policy. As further described in Chapter 3, Project Description, the proposed project would result in the designation of trails for new and existing residents to utilize.

Table 4.10-2. General Plan Land Use Consistency Analysis

Goals, Objectives, and Policies	Discussion
Policy LU 8.1.3: Implement a master plan for parks, with special focus on provision of additional playfields for youth sports in locations accessible to underserved neighborhoods.	Not Applicable. This policy is directed for the City. However, for informational purposes, the proposed project would result in the designation of recreational open space on site. The proposed project would not conflict with the City's implementation of this policy.
Policy LU 8.1.4: Ensure that an adequate and diverse supply of child care facilities and services is available to parents who live and/or work in the Santa Clarita Valley, by promoting child care facilities in commercial and residential areas subject to the applicable zoning requirements	Not Applicable. The proposed project does not involve the construction of child-care related facilities. The project would not conflict with the implementation of this policy.
Policy LU 8.1.5: Coordinate with the Los Angeles County Library System to assist in expanding library services as needed to meet the needs of the community.	Consistent. See response to Objective LU 8.1.
Policy LU 8.1.6: Coordinate with the Arts Alliance and other similar entities to promote access to cultural events and facilities for all residents.	Not Applicable. This policy is directed for the City. The proposed project would not conflict with the City's implementation of this policy.
Policy LU 8.1.7: Work with medical service providers to facilitate preservation and enhancement of health services, including the Santa Clarita Valley's trauma center, provided applications are in conformance with applicable General Plan policies and environmental requirements.	Not Applicable. This policy is directed for the City. The proposed project would not conflict with the City's implementation of this policy.
Policy LU 8.1.8: Work with social service agencies providing assistance to homeless persons to develop and maintain a suitable shelter in the Santa Clarita Valley.	Not Applicable. This policy is directed for the City. The proposed project would not conflict with the City's implementation of this policy.
Policy LU 8.1.9: Assist persons and households with temporary housing needs by promoting transitional housing facilities for victims of domestic violence in multiple-family residential land use designations, subject to applicable zoning requirements.	Not Applicable. This policy is directed for the City. The proposed project would not conflict with the City's implementation of this policy.
Policy LU 8.1.10: Coordinate with agencies that provide services to seniors and the elderly to expand senior facilities, which may include a new senior center.	Consistent. The proposed project involves the construction of a new senior living facility that would include 61 assisted living units, 130 independent living units, and 26 memory care beds.
Policy LU 8.1.11: Work with existing utilities, agencies and renewable energy companies to remove barriers to renewable energy production.	Not Applicable. This policy is directed for the City. The proposed project would not conflict with the City's implementation of this policy.

Table 4.10-2. General Plan Land Use Consistency Analysis

Goals, Objectives, and Policies	Discussion
Policy LU 8.1.12: The City, County and the school districts shall cooperate to identify appropriate land to construct new school facilities throughout the planning area. Annual information and update meetings between the planning agencies and the districts are encouraged.	Not Applicable. This policy is directed for the City. The proposed project would not conflict with the City's implementation of this policy.
Policy LU 8.1.13: In meeting state law for mitigation, there may be times when additional resources are required in order for the district to fully provide necessary services. Accordingly, Developers are encouraged to reach full mitigation agreements with the appropriate school districts impacted by their proposed project. Mitigation may include, but might not be limited to, modifications to existing school sites.	Consistent. See response to Objective LU 8.1.
Policy LU 8.1.14: Developers of infill projects shall be aware of the potential cumulative effect that these smaller projects have on schools. Pre and post construction, infill projects shall be monitored to evaluate student generation rates.	Consistent. See response to Objective LU 8.1. An analysis of the project's student generation and its contribution to cumulative impacts related to school have been included in Section 4.14, Public Services, of the Draft EIR. Through the payment of Development Impact Fees, the project's impacts on public school services would be less than significant.
Policy LU 8.1.15: Proposed school sites shall be sufficiently sized, pre-identified and on California Department of Education and Department of Toxic Substances Control approvable land. Further site design considerations shall include appropriate pedestrian and bicycle access.	Not Applicable. This policy is directed for the City. The proposed project would not conflict with the City's implementation of this policy.
Objective LU 8.2: Ensure equal access to community services and facilities by all residents.	Consistent. See response to Goal LU 8.
Policy LU 8.2.1: In making locational decisions for siting new community facilities, consider ease of access for all users (vehicular, pedestrian, and transit).	Not Applicable. This policy is directed for the City. The proposed project would not conflict with the City's implementation of this policy.
Policy LU 8.2.2: Identify neighborhoods that are underserved by public facilities and community services, and plan for equitable distribution of these facilities.	Not Applicable. This policy is directed for the City. The proposed project would not conflict with the City's implementation of this policy.
Objective LU 8.3: Promote equitable development and utilization of land.	Consistent. The proposed project would develop an underutilized, previously disturbed site to provide residential, recreational, and commercial space to the community.

Table 4.10-2. General Plan Land Use Consistency Analysis

Goals, Objectives, and Policies	Discussion
Policy LU 8.3.1: Require fair and equitable treatment in considering, adopting, implementing, and enforcing development regulations and policies, including but not limited to providing equal opportunity for public input and considering impacts from development approvals on all segments of the population.	Consistent. The project is subject to City developmental review, which includes opportunity for the public to attend hearings where they can submit verbal comments. Additionally, a 30-day scoping period was held in the Spring of 2022, and the CEQA review period allows for a 45-day comment period in which the public may review this EIR and submit written comments on it. Given this, opportunity for fair and equitable public input would be provided for the proposed project.
Goal LU 9: Adequate public facilities and services, provided in a timely manner and in appropriate locations to serve existing and future residents and businesses.	Consistent. See response to Goal LU 8. Through the payment of Development Impact Fees, the City's public services would be able to continue to provide an adequate level of service, including timely response times.
Objective LU 9.1: Coordinate land use planning with provision of adequate public services and facilities to support development.	Consistent. See response to Goal LU 9.
Policy LU 9.1.1: Ensure construction of adequate infrastructure to meet the needs of new development prior to occupancy.	Consistent. The proposed project would be developed on a predominately vacant lot within an urbanized community surrounded by existing infrastructure (i.e., wet and dry utilities). Section 4.18, Utilities and Service Systems, analyzes project-related impacts associated with the connection and necessary construction of adequate infrastructure to meet the needs of the proposed project. As discussed in Section 4.18, the project's utility development components would sufficiently meet the needs of the project site. Additionally, the utility providers in the City, including the water, wastewater treatment, and solid waste collection providers, have the capacity to adequately serve the project. Therefore, all project impacts associated with utility and service systems would be less than significant.
Policy LU 9.1.2: Coordinate review of development projects with other agencies and special districts providing utilities and other services.	Consistent . The City would coordinate project review with other applicable agencies as necessary, including Fire Department and LASO. See Sections 4.16 and 4.18 for details.
Policy LU 9.1.3: Protect major utility transmission corridors, pumping stations, reservoirs, booster stations, and other similar facilities from encroachment by incompatible uses, while allowing non-intrusive uses such as plant nurseries, greenbelts and recreational trails.	Consistent. The proposed project would not result in encroachment on any utility transmission corridors, pumping stations, reservoirs, booster stations, or other similar facilities. The project would, however, include drought-tolerant landscaping, 1.3 miles of pedestrian and bike trails, and 5 acres of greenbelt space.
Policy LU 9.1.4: Develop and apply compatible standards within City and County areas for design and maintenance of utility infrastructure, in consideration of the character of each community.	Not Applicable. This policy is directed for the City. The project's utility infrastructure would be designed and maintained in compliance with all applicable standards.

Table 4.10-2. General Plan Land Use Consistency Analysis

Goals, Objectives, and Policies	Discussion
Policy LU 9.1.5: Work with the Los Angeles County Sheriff's Department to expand law enforcement facilities to meet the needs of the Santa Clarita Valley's growing population.	Consistent. See response to Goal LU 9 and Section 4.14, Public Services.
Policy LU 9.1.6: Coordinate with appropriate agencies and organizations to ensure that landfill expansion needs are met while minimizing adverse impacts to Valley residents.	Consistent. As discussed in Section 4.18, Utilities and Service Systems, the Sunshine Canyon Landfill, the closest landfill to the project site, has adequate capacity to serve the project. The project's construction and operational contributions to the landfill would be nominal when compared to their permitted daily, yearly, and overall capacity.
Policy LU 9.1.7: Provide for location of additional waste transfer stations and other facilities to promote recycling and reuse of materials within Industrial designations on the Land Use Map, subject to applicable zoning requirements.	Not Applicable. This policy is directed for the City. The proposed project would not conflict with the City's implementation of this policy.
Objective LU 9.2: Coordination of City and County sewer master planning and sewer mitigation to support future development and avoid fiscal impacts to local government or the existing community.	Consistent. The proposed project would be located within the service area for the Valencia Water Reclamation Plant (WRP) and the Saugus WRP. The Saugus WRP provides primary, secondary, and tertiary treatment for 6.5 million gallons of wastewater per day as part of the Santa Clarita Valley Sanitation District; however, the Saugus WRP does not process solid waste, which is treated at the Valencia WRP. Impacts related to wastewater treatment are determined to be less than significant. See Section 4.18, Utilities and Services Systems, of this Draft EIR for more discussion. The proposed project would be subject to a fair-share DIF to pay for its portion of the upgrades.
Policy LU 9.2.1: Ensure that the cost of extending new sewer infrastructure is fully borne by the new development that is served, and is not passed on to the existing community.	Consistent. See response to Objective LU 9.2.
Policy LU 9.2.2: Require that all new development mitigates its impact on existing sewer capacity by upgrading facilities when warranted or payment of a fee to allow construction of new facilities when needed.	Consistent. See response to Objective LU 9.2.
Policy LU 9.2.3: Develop a common City/County capacity-based threshold to determine when new development will be required to construct upsized downstream sewer facilities.	Consistent. The project would develop new sewer lines to connect the project to the City's existing sewer infrastructure. As discussed in Section 4.18, Utilities and Service Systems, the City's existing sewer infrastructure has adequate capacity to serve the project site. The wastewater from the site would be treated at the Saugus and Valencia Water Reclamation Plants. These plants have sufficient capacity to serve the project, and the project would represent a nominal contribution to these plants when compared to their existing daily wastewater acceptance levels.

Table 4.10-2. General Plan Land Use Consistency Analysis

Goals, Objectives, and Policies	Discussion
Policy LU 9.2.4: Facilitate the efficient construction of sewer infrastructure by sizing facilities to accommodate anticipated future sewer flows within the sewershed.	Consistent. See response to Policy LU 9.2.3 above.
Policy LU 9.2.5: Cooperate with the development community to allow reimbursement for the cost of constructed sewer facilities with a capacity that exceeds what would be required to mitigate a project's own sewer impact.	Not Applicable. This strategy is directed to the City. The proposed project would not conflict with the City's implementation of this strategy.
Policy LU 9.2.6: Coordinate to ensure that new development projects have agreed to mitigate both City and County sewer impacts prior to project approval.	Consistent. See response to Objective LU 9.2.
Policy LU 9.2.7: Ensure that properties which benefit from increased density or intensity of development resulting from a General Plan Amendments fully mitigate their increased sewer impact at the time that development or redevelopment occurs on their properties.	Consistent. See response to Objective LU 9.2.
Economic Development Element ⁴	
1. Engage in activities that will establish an appropriate jobs/housing balance.	Consistent. As discussed in Section 4.13, Population and Housing, the Santa Clarita Valley is expected to see an increase in employment by 128,850 jobs between 2010 and 2030, which would increase the demand for housing in the Santa Clarita Valley. The proposed project would result in the creation of 90 jobs as well as the construction of 379 residential multifamily residential units and senior care facility. The multifamily residential units and senior care facility would house approximately 1,371 residents. These residential components would allow the City to maintain an appropriate jobs/housing balance as the area continues to see job growth.
2. Attract and promote businesses that provide high-quality, high-paying jobs for local residents.	Consistent. The proposed project would involve the creation of approximately 90 jobs. Moreover, the project would not inhibit the implementation of this strategy.
3. Target the four main industry clusters currently identified and, as needed, refine the process to support these industries.	Not Applicable. The proposed project does not involve development related to the four main industry clusters identified: entertainment, aerospace, biomedical, and technology. As such, the proposed project would not conflict with the implementation of this strategy.

Note: This element does not contain goals, instead the following City-identified Planning Issues are used for this analysis

Table 4.10-2. General Plan Land Use Consistency Analysis

Goals, Objectives, and Policies	Discussion			
4. Develop and participate in programs that assist local businesses thrive, such as the Enterprise Zone, Recycling Market Development Zone, and Use Tax Incentive Program.	Not Applicable. This strategy is directed to the City. The proposed project would not conflict with the City's implementation of this strategy.			
5. Build an economic base for all communities through increased sales tax generation.	Not Applicable. This strategy is directed to the City. The proposed project would not conflict with the City's implementation of this strategy.			
6. Continue collaborative relationships with key economic development agencies.	Not Applicable. This strategy is directed to the City. The proposed project would not conflict with the City's implementation of this strategy.			
7. Partner with local education institutions, employers, and others to evaluate the workforce training needs and provide timely opportunities for development of the local workforce.	Not Applicable. This strategy is directed to the City. The proposed project would not conflict with the City's implementation of this strategy.			
8. Develop economic wealth by attracting external monies to Santa Clarita.	Consistent. The proposed project would provide housing opportunities for residents of other cities to relocate to the City of Santa Clarita. The senior living facility also has the potential to attract residents from other cities for its independent living units as well as its assisted living and memory care units.			
9. Provide a wide range of retail, entertainment, and cultural opportunities to serve residents and visitors throughout Santa Clarita.	Not Applicable. This strategy is directed to the City. The proposed project involves the development of primarily residential, recreational space, and limited commercial space. The project would not conflict with the City's implementation of this strategy.			
10. Attract and support cultural and sports-related events that attract large audiences from regional and national markets and promote Santa Clarita as a tourist destination.	Not Applicable. See response to Strategy 9.			
Circulation Element				
Goal C 1: An inter-connected network of circulation facilities that integrates all travel modes, provides viable alternatives to automobile use, and conforms with regional plans.	Consistent. The proposed project would include the development of interior roads on the project site as well as off-site circulation improvements along Wiley Canyon Road. The project site is located near the I-5 freeway and Santa Clarita bus transit options, which will provide easy access to jobs and other commercial areas in the City and greater Los Angeles area. The project also includes the construction of bus bays form the northern boundary of the project site to Calgrove Boulevard.			
	Furthermore, the proposed project would include 1.3 miles of 16-foot-wide pedestrian and bike trails throughout the project site and along Wiley Canyon Road to provide active recreational opportunities to on-site residents and provide greater pedestrian network connectivity to the surrounding areas, accessible to both visitors and existing residents in the vicinity. The project will provide a Class I bike trail from the project site south to Calgrove Boulevard, and Calgrove Boulevard will be restriped to provide Class II bike			

Table 4.10-2. General Plan Land Use Consistency Analysis

Goals, Objectives, and Policies	Discussion			
	lanes to connect cyclists at the project site to other parts of the city with existing bike infrastructure.			
Goal C 2: A unified and well-maintained network of streets and highways which provides safe and efficient movement of people and goods between neighborhoods, districts, and regional centers, while maintaining community character.	Consistent. The proposed project would involve a number of on- and off-site circulation improvements. Public access to the project would be provided by a private street connection to Wiley Canyon Road. The primary project entrance would be located at the northern end of the site and controlled by a single-lane roundabout. An emergency vehicle-only access would be provided by a driveway on Hawkbryn Avenue. The project would also include the installation of off-site roundabouts along Wiley Canyon Road at the project's entrance, Canerwell Street, and at Calgrove Boulevard.			
Goal C 3: Reduction of vehicle trips and emissions through effective management of travel demand, transportation systems, and parking.	Consistent. See Goal C 1. The proposed project site is located near existing public transit bus infrastructure that would allow for alternative access to jobs and other commercial areas in the City and greater Los Angeles area. The project would include the development of both on- and off-site pedestrian and bike trails.			
Goal C 4: Rail service to meet regional and inter-regional needs for convenient, cost-effective travel alternatives, which are fully integrated into the Valley's circulation systems and land use patterns.	Consistent. The project site is located near bus transit options, which ultimately provides connections to the rail network, which would facilitate access to jobs and other commercial areas in the City and greater Los Angeles area.			
Goal C 5: Bus transit service as a viable choice for all residents, easily accessible and serving destinations throughout the Valley.	Consistent. See Response to Goal LU 8.			
Goal C 6: A unified and well-maintained bikeway system with safe and convenient routes for commuting, recreational use and utilitarian travel, connecting communities and the region.	Consistent. The project would provide a Class I bike trail from the project site south to Calgrove Boulevard, and Calgrove Boulevard would be restriped to provide Class II bike lanes to connect cyclists at the project site to other parts of the city with existing bike infrastructure.			
Goal C 7: Walkable communities, in which interconnected walkways provide a safe, comfortable and viable alternative to driving for local destinations.	Consistent. The proposed project would involve the development of sidewalks along roadways and the project's facilities. The project would also include the construction of 1.3 miles of pedestrian and bike trails that would connect the project site to surrounding areas of the City. Additionally, consistent with SCMC Section 17.51.050, the project would integrate nighttime lighting throughout the project site to increase safety and enjoyment.			
Noise Element				
Goal N 1: A healthy and safe noise environment for Santa Clarita Valley residents, employees, and visitors.	Partially Consistent. As discussed in Section 4.12, Noise, during construction, the project's temporary construction noise levels would exceed exterior daytime noise standards at the identified sensitive receptors. Implementation of the project would be			

Table 4.10-2. General Plan Land Use Consistency Analysis

Goals, Objectives, and Policies	Discussion			
	consistent with the City's noise regulations, specifically Municipal Code Section 11.44.080. In addition, MM-NOI-1 and MM-NOI-2 would serve to reduce construction noise levels. Nevertheless, as discussed in Section 4.12 of this EIR, the project's temporary construction noise levels would be considered significant and unavoidable under the defined threshold. Although a significant unavoidable impact is anticipated, an impact under this threshold does not equate to a substantial adverse effect to health and safety. As detailed in Section 4.12, project construction would result in noise levels at adjacent sensitive receiver locations exceeding the City's ambient noise (57.7 to 70 dBA Leq) plus 5 dBA (62.7 to 77 dBA Leq) significance threshold. However, a gas lawn mower at 3 feet from a noise receiver, for example, typically results in noise levels measured at 95 dBA. As such, the magnitude of the construction-related noise would be less than common outdoor activities. Moreover, the City restricts construction activities to 7 PM on weekdays and 6 PM on Saturdays. Thus, the project would not result in overnight construction noise affecting nearby residences. Furthermore, all construction-related impacts would cease to occur upon the completion of the construction phases. Additionally, a noise analysis conducted for the project found that noise generated during the operation of the project, including noise associated with generated traffic, operational equipment, and parking, would result in a less than significant impact. Furthermore, the noise analysis conducted found that there would be a less than significant impact associated with the vibration generated from project construction, and that the operations of the project would not result in the generation of substantial ground vibration.			
Goal N 2: Protect residents and sensitive receptors from traffic-generated noise.	Consistent. As discussed in Section 4.12, Noise, the project would result in minor changes to the traffic-related noise levels in the project area. Therefore, the project would result in less than significant impacts associated with traffic-related noise.			
Goal N 3: Protect residential neighborhoods from excessive noise.	Consistent. See response to Goal N 1.			
Goal N 4: Protection of sensitive uses from commercial and industrial noise generators.	Consistent. See response to Goal N 1.			
Conservation and Open Space Element				
Goal CO.1: A balance between the social and economic needs of Santa Clarita Valley residents and protection of the natural environment, so that these needs can be met in the present and in the future.	Consistent. The proposed project involves the development of residential, commercial, and recreational and open space on previously disturbed, under-utilized space. These developments would provide housing for the City while also creating approximately 90 jobs. The project would also involve open space improvements including a 50,600			

Table 4.10-2. General Plan Land Use Consistency Analysis

Goals, Objectives, and Policies	Discussion		
	square-foot recreational pad, 5 acres of greenbelt open space, 2.9 acres of undeveloped open space, and approximately 1.3 miles of pedestrian and bike trails. As discussed in Section 4.3, Biological Resources, the project's impact on biological resources would also be mitigated to a less-than-significant level.		
Goal CO 2: Conserve the Santa Clarita Valley's hillsides, canyons, ridgelines, soils, and minerals, which provide the physical setting for the natural and built environments.	Not Applicable. The proposed project site is not located on hillsides, canyons, or ridgelines. As discussed in Section 4.1, Aesthetics, Section 4.6, Geology and Soils, and Section 4.11, Mineral Resources, the project-related impacts to hillsides, canyons, ridgelines, soils, and minerals would be less than significant. Additionally, the significance of the on-site minerals are unknown, and no mineral extraction activities occur or are permitted on the project site. For more discussion, see Section 4.11 of this EIR.		
Goal CO 3: Conservation of biological resources and ecosystems, including sensitive habitats and species.	Partially Consistent. The proposed project has the potential to impact special status wildlife species, sensitive plant communities, and state and federally protected waters. The implementation of MM-BIO-1 through MM-BIO-5, however, would reduce these impacts to less-than-significant level. For more discussion, refer to the responses for Objective LU 6.1 and Policies LU 1.3.6 and 7.6.2.		
Goal CO 4: An adequate supply of clean water to meet the needs of present and future residents and businesses, balanced with the needs of natural ecosystems.	Consistent. The Santa Clarita Valley Water Agency has determined that the project's anticipated water demand would be adequately met by the agency (Appendix L). See Section 4.18, Utilities and Service Systems.		
Goal CO 5: Protection of historical and culturally significant resources that contribute to community identity and a sense of history.	Consistent. See response to Policy LU 2.2.2.		
Goal CO 6: Preservation of scenic features that keep the Santa Clarita Valley beautiful and enhance quality of life, community identity, and property values.	Consistent. See response to Policy LU 1.1.4.		
Goal CO 7: Clean air to protect human health and support healthy ecosystems.	Consistent. As demonstrated in Section 4.2, Air Quality, of this Draft EIR, project-related effects to nearby sensitive receptors (i.e., nearby residences) would be less than significant with mitigation measure MM-AQ-1 incorporated. All other air quality impacts as a result of the project were determined to be less than significant. See Section 4.2, Air Quality, of this Draft EIR for more discussion. The proposed project would help the City achieve this goal.		
Goal CO 8: Development designed to improve energy efficiency, reduce energy and natural resource consumption, and reduce emissions of greenhouse gases.	Consistent. See response to Goal LU 7. Additionally, the project would result in less than significant impacts related to greenhouse gas emissions. See Section 4.7, Greenhouse		

Table 4.10-2. General Plan Land Use Consistency Analysis

Goals, Objectives, and Policies	Discussion			
	Gas Emissions, of this Draft EIR for more discussion. The proposed project would help the City achieve this goal.			
Goal CO 9: Equitable distribution of park, recreational, and trail facilities to serve all areas and demographic needs of existing and future residents.	Consistent. See response to Desired Characteristic 7 above. Additionally, as discussed in Section 4.14, Public Services, and Section 4.15, Recreation, there are many public parks located in the vicinity of the project site that would be available to the project's residents.			
Goal CO 10: Preservation of open space to meet the community's multiple objectives for resource preservation.	Consistent. The proposed project would dedicate a portion of the project site for open space, including 5 acres of greenbelt open space and 2.9 acres of undeveloped open space. Additionally, the project would include approximately 1.3 miles of pedestrian and bike trails.			
Safety Element				
Goal S 1: Protection of public safety and property from hazardous geological conditions, including seismic rupture and ground shaking, soil instability, and related hazards.	Consistent. As described in Section 4.6, Geology and Soils, due to the project site's characteristics, as well as the project's design features, impacts related to hazardous geologic conditions would be less than significant.			
Goal S 2: Protection of public safety and property from unreasonable risks due to flooding.	Consistent. See response to Policy LU 7.3.5.			
Goal S 3: Protection of public safety infrastructure and property from fires	Consistent. See response to Policy LU 3.3.2.			
Goal S 4: Protection of public safety and property from hazardous materials.	Consistent. As discussed in Section 4.8 Hazards and Hazardous Materials, the project is not anticipated to create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials. The implementation of construction best management practices would help to control the use of hazardous materials during construction and would minimize the potential for these materials to leave the site. During operation, potentially hazardous materials used onsite would include commercially available substance such as cleaning products, landscaping chemicals and fertilizers, pool chemicals, and medical supplies. These products would be used and stored in compliance with all applicable health and safety regulations, guidelines and laws. Therefore, during construction and operation, the project is not anticipated to create a significant hazard to the public through the use of hazardous materials.			
Goal S 5: Protection of public safety through the provision of law enforcement services and crime prevention strategies.	Consistent. See response to Goal LU 9 and Section 4.14, Public Services. In addition to the payment of Development Impact Fees, the proposed project would include a number of crime prevention measures such as adequate nighttime lighting, an entry kiosk with security gates at the main entrance of the multifamily residential area, and walls and fencing around portions of the project site.			

Table 4.10-2. General Plan Land Use Consistency Analysis

Goals, Objectives, and Policies	Discussion		
Goal S 6: Reduced risk to public safety and property damage from accidental occurrences.	Consistent See responses to Goal S 1 through S 7.		
Goal S 7: Protection of the public through planning for disaster response and recovery, in order to minimize damage from emergency incidents or terrorist activities.	Consistent. As discussed in Section 4.19, Wildfire, project design features such as fuel modification zones would promote safety and compliance with existing regulations related to wildfire and associated hazards. With implementation of fire protection and prevention measures as outlined in MM-FIRE-1 through MM-FIRE-3, impacts related to wildfire would be less than significant. For more discussion on impacts related to wildfire refer to Section 4.19, Wildfire, of this Draft EIR. The proposed project would help the City achieve this goal.		
Goal S 8: Protection of the public from climate change related hazards through adaptation and mitigation strategies.	Consistent. An analysis on the project site's environmental and regulatory setting is provided in Section 4.7, Greenhouse Gas Emissions. As discussed, greenhouse gas emissions globally result in climate change effects. The project's contribution to greenhouse gas emissions against applicable thresholds, laws, and regulatory plans are detailed in Section 4.7. The project would result in less than significant impacts related to greenhouse gas emissions. See Section 4.7, Greenhouse Gas Emissions, of this Draft EIR for more discussion. The proposed project would help the City achieve this goal.		
Housing Element			
Goal H1: Identify and maintain adequate sites for housing to accommodate the City's regional housing need throughout the planning period.	Consistent. As previously discussed, the project site and its surrounding area has been identified as a Special Development Area. The proposed project would result in the construction of 379 multifamily residential units and a senior living facility that would include 61 assisted living units, 130 independent living units, and 26 memory care beds. As described in Section 4.13, Population and Housing, the City is planning for the construction of 10,031 housing units for the planning period between 2021 and 2029. The proposed project would help the City achieve this goal.		
Goal H2: Promote the production of housing units, including affordable units, to meet the City's identified housing needs.	Consistent. See response of Goal H1. The proposed project would include the provision of 379 multifamily residential units. While the project would not necessarily introduce new affordable units, the project would not inhibit the City from meeting this citywide goal in providing new housing.		
Goal H3: Sustain and Improve Existing Housing Units and Programs	Partially Consistent. The proposed project would not sustain or improve existing housing units or programs. The project site is currently vacant with the exception of two single-story metal buildings, two mobile homes, former mule barns, and one drained, manmade water basin associated with the former Smiser Mule Ranch which historically occupied the site. Although the project would result in the demolition of two existing mobile homes, these housing units are currently vacant and the project would result in		

Table 4.10-2. General Plan Land Use Consistency Analysis

Goals, Objectives, and Policies	Discussion	
	379 new multifamily residential units on site. As such, the project would not conflict with the implementation of this goal.	
Goal H4: Ensure fair access to quality housing and services for all members of the community, including those with special needs.	Consistent. See response to Goal LU 8. The proposed project would provide housing that would be accessible to members of the community, including seniors with varying levels of need.	

Source: City of Santa Clarita 2011; City of Santa Clarita 2022b; City of Santa Clarita 2022c.

As shown in Table 4.10-2, the project would be partially consistent or consistent with all of the goals, objectives, and policies identified in the City's General Plan. Where the project has the potential to result in conflicts with applicable goals adopted for the purpose of avoiding or mitigating an environmental effect, mitigation measures were identified to demonstrate the potential impacts could be reduced to less than significant levels (i.e., MM-BIO-1 through MM-BIO-5 and MM-HYD-1). As such, the identified inconsistencies would not result in a conflict the City's General Plan. Therefore, impacts would be **less than significant with mitigation**.

Conclusion

The proposed project is consistent with the City's zoning for the project site with the approval of a Conditional Use Permit and Minor Use Permit. Moreover, the project would be subject to Development and Architectural Design Review by the City's Planning Commission, in compliance with SCMC section 17.55.040, Architectural and Design Standards, and would be subject an Oak Tree Permit, pursuant to SCMC Section 17.51.040, Oak Tree Preservation.

The proposed project would not require a General Plan amendment to the site's existing land use designation of Mixed Use – Neighborhood, as the project would be consistent with the intended use, density, FAR, and height limitations established for the site. Furthermore, the project site is identified as a Special Development Area by the General Plan and is subject to a set of desired development characteristics. Table 4.10-1, above, details the project's consistency with the specified standards and assumptions for the project site and surrounding area. Additionally, as demonstrated in Table 4.10-2, the project is either partially consistent or entirely consistent with the City's General Plan's applicable goals, objectives, and policies, and with the implementation of MM-AQ-1, MM-BIO-1 through MM-BIO-5, MM-HYD-1, and MM-FIRE-1 through MM-FIRE-3, impacts would be reduced to a less than significant level. As shown in Table 4.16-3, Project Consistency with RTP/SCS Goals, in Section 4.16, Transportation, the project is also consistent with the Connect SoCal goals, as set forth by SCAG. Therefore, the project's impacts in regard to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect would be **less than significant with mitigation.**

4.10.5 Mitigation Measures

As described in Section 4.10.4, Impact Analysis, the mitigation measures outlined throughout this EIR (i.e., MM-AQ-1, MM-BIO-1 through MM-BIO-5, MM-HYD-1, and MM-FIRE-1 through MM-FIRE-3) would ensure consistency between the proposed project and applicable land use plans, policies, and regulations that have been adopted for the purpose of avoiding or mitigating an environmental effect to the maximum extent feasible.

MM-AQ-1	See Section 4.2, Air Quality, of this EIR
MM-BIO-1	See Section 4.3, Biological Resources, of this EIR
MM-BIO-2	See Section 4.3, Biological Resources, of this EIR
MM-BIO-3	See Section 4.3, Biological Resources, of this EIR
MM-BIO-4	See Section 4.3, Biological Resources, of this EIR
MM-BIO-5	See Section 4.3, Biological Resources, of this EIR
MM-HYD-1	See Section 4.9, Hydrology and Water Quality, of this EIR

MM-NOI-1 See Section 4.12, Noise, of this EIR

MM-NOI-2 See Section 4.12, Noise, of this EIR

MM-FIRE-1 See Section 4.19, Wildfire, of this EIR

MM-FIRE-2 See Section 4.19, Wildfire, of this EIR

MM-FIRE-3 See Section 4.19, Wildfire, of this EIR

4.10.6 Level of Significance After Mitigation

Threshold LU-2: Would the project cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?

With implementation of the mitigation measures outlined throughout this EIR, impacts associated with land use and planning would be **less than significant**.

4.10.7 Cumulative Effects

Cumulative land use impacts would result from projects that contribute to development inconsistent with applicable plans or incompatible with existing or planned uses or would combine to physically divide a community. Cumulative projects identified in Table 3-4 would be required to demonstrate compatibility with the applicable General Plan and to be consistent with the goals and policies identified therein. Projects are also required to comply with the SCAG RTP/SCS. As such, each of the projects would be subject to evaluation of consistency with their appliable General Plan and SCAG's RTP/SCS.

As stated in Section 4.10, Land Use and Planning, and as shown in Table 4.10-1, Table 4.10-2, and Table 4.16-3, the proposed project would be partially consistent with the goals and policies outlined in the City's General Plan, the SCAG RTP/SCS, and applicable land use standards and guidelines. Section 4.10 also states that the project would not physically divide an established community.

Given the above, while the proposed project does result in project-specific impacts, the project would not contribute to a cumulatively considerable land use and planning-related impact. As such, cumulative impacts would be **less** than significant.

4.10.8 References Cited

City of Santa Clarita. 2011. City of Santa Clarita General Plan. Also known as One Valley One Vision. June 2011. Accessed November 2022. https://www.codepublishing.com/CA/SantaClarita/html/SantaClaritaGP/SantaClaritaGP.html.

City of Santa Clarita. 2022a. Santa Clarita Enterprise Zone Street Map. Accessed November 2022. https://www.santa-clarita.com/home/showdocument?id=6976.

- City of Santa Clarita. 2022b. City of Santa Clarita General Plan: Safety Element. May 2022. Accessed November 2022. https://www.codepublishing.com/CA/SantaClarita/html/SantaClaritaGP/7%20-%20Safety%20Element.pdf.
- City of Santa Clarita. 2022c. City of Santa Clarita General Plan: Draft Housing Element. May 2022. Accessed November 2022. https://www.santa-clarita.com/home/showpublisheddocument/21038/637861567068130000.
- Los Angeles Department of Regional Planning. 2012. Santa Clarita Valley Area Plan: One Valley One Vision. Accessed February 23, 2024. https://planning.lacounty.gov/wp-content/uploads/2022/10/Santa-Clarita-Valley-Area-Plan.pdf.
- SCAG (Southern California Association of Governments). 2019. Local Profiles Report: Profile of the City of Santa Clarita. May 2019. Accessed November 2022. https://scag.ca.gov/sites/main/files/file-attachments/santaclarita_localprofile.pdf?1606011177.
- SCAG. 2020. The 2020–2045 Regional Transportation Plan/Sustainable Communities Strategy of the Southern California Association of Governments, Connect SoCal. https://www.connectsocal.org/Documents/Adopted/fConnectSoCal-Plan.pdf.

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4.11 Mineral Resources

This section describes the existing mineral resources setting for the City of Santa Clarita (City), identifies associated regulatory requirements, evaluates potential impacts, and identifies mitigation measures related to implementation of the proposed Wiley Canyon Project (project). The analysis is based on a review of existing resources and applicable laws, regulations, and guidelines.

4.11.1 Environmental Setting

Regional Setting

Mineral Resource Potential

As mandated by the Surface Mining and Reclamation Act of 1975 (SMARA), the California State Mining and Geology Board classifies California mineral resources with the Mineral Resource Zones (MRZs) system. These zones were established based on the presence or absence of significant sand and gravel deposits and crushed rock source areas (i.e., products used in the production of cement). The classification system emphasizes Portland Cement Concrete aggregate, which is subject to a series of specifications to ensure the manufacture of strong, durable concrete. The following guidelines are presented in SMARA's mineral land classification for the region (DOC 2021):

- MRZ-1 Areas where adequate geologic information indicates that no significant mineral deposits are
 present, or where it is judged that little likelihood exists for their presence
- MRZ-2 Areas where adequate information indicates that significant mineral deposits are present, or where it is judged that there is a high likelihood for their presence
- MRZ-3 Areas containing mineral deposits, the significance of which cannot be evaluated from available data
- MRZ-4 Areas where available information is inadequate for assignment to any other MRZ zone

Saugus-Newhall Production-Consumption (P-C) Region

The project site is located within the Saugus-Newhall Production-Consumption (P-C) Region. The Saugus-Newhall P-C Region boundaries are based on identification of active aggregate operations (Production) and the market area served (Consumption). The Saugus-Newhall P-C Region is situated in the northern part of Los Angeles County and includes the upper Santa Clara River Valley and a large area in the hills to the north of the valley (DOC 1984). The following areas within this region, identified below, contain information indicating if significant mineral deposits are present, or where it is judged that there is a high likelihood for mineral deposits to be present (DOC 1984).

Santa Clara River Valley

The Santa Clara River flows from near Soledad Pass, east of the Saugus-Newhall P-C Region into Ventura County. A number of tributary streams join the Santa Clara River within the region; the most significant of these are Castaic Creek, Newhall Creek, Bouquet Canyon, and Sand Canyon. Detritus that has been transported by the river and its tributaries has been deposited along the Santa Clara River channel and on the adjacent floodplain to form a 15-mile-long linear deposit ranging from 500 to 6,000 feet wide and up to 80 feet in thickness. A total area of approximately 10 square miles of the river channel has been classified as MRZ-2 (DOC 1984).

Mint Canyon Formation

The Miocene Mint Canyon Formation, which consists of fine- to coarse-grained, well-consolidated, non-marine sediments is widely distributed in the Saugus-Newhall P-C Region, covering approximately 45 square miles; 4 square miles are classified as MRZ-2. The Mint Canyon Formation extends from one mile east of Agua Dulce Canyon to the San Gabriel fault on the west and is bounded on the north by Sierra Pelona and the south by the anorthosite-gabbro and granitic rocks of the San Gabriel Mountains.

The lower fluvial portion of the Mint Canyon Formation, which is approximately 3,100 feet thick, consists of coarse-grained sediments derived chiefly from the local mountainous areas of Sierra Pelona and the western San Gabriel Mountains. This lower portion grades upward (south and west of Soledad Canyon) into finer grained sediments of lacustrine (derived from lakes) origin. The lower portion of the Mint Canyon Formation is currently actively mined and produces relatively durable coarse particles (pebbles, cobbles, and bounders) of granite, anorthosite, gabbro, and fragments of volcanic rocks which are suitable for Portland cement aggregate.

The parts of the Mint Canyon Formation that have been classified as MRZ-3 due to lack of data may offer a high potential for yielding material suitable for concrete aggregate. Several parts of the area designated MRZ-3, especially the fluvial section, contain beds or lenses of sandstone or conglomerate that could possibly yield aggregate. The finer grained lacustrine sections of this unit are generally unacceptable for Portland Cement Concrete (PCC)-grade aggregate.

Anorthosite-Gabbro Group

The San Gabriel Mountains south and southeast of Lang Station (historical landmark in Canyon Country, previously referred to as Lang Siding) contain 6 square miles of ground underlain by anorthosite and gabbro, classified as MRZ-2 for its crushed stone aggregate resource.

The principal rock types of the anorthosite-gabbro group are andesine anorthosite, gabbroic anorthosite, anorthositic gabbro and gabbro, which show sharp to gradational contacts and vary only in the proportion of feldspar to ferromagnesian (mafic) minerals. The anorthosite is composed of 0 to 18 percent mafic minerals, the gabbroic anorthosite is 10 to 22 1/2 percent mafic mineral, the anorthositic gabbro is 22 1/2 percent to 35 percent mafic minerals and the gabbro ranges from 35 percent to 65 percent mafic minerals.

The anorthosite and gabbro crop out along the southwestern portion of the Saugus-Newhall P-C Region forming rugged mountains of moderate to high relief.

MRZs within the Saugus-Newhall P-C Region

The MRZ-1 areas in the Saugus-Newhall P-C Region include parts of the Santa Susana Mountains, hills adjacent to the San Martinez Grande Canyon (west of Castaic Junction), hills both to the east and west of Castaic Lagoon, hills adjacent to Dry Canyon Reservoir, and hills bounding Bouquet Canyon just south of Del Sur Ridge. The sedimentary rocks which are classified as MRZ-1 are siltstones, mudstones, and siliceous shales with minor amounts of sandstone and limestone of the Modelo Formation (upper Miocene); siltstones and very fine sandstones of the Pico Formation; and siltstones and mudstones of the Towsley Formation (upper Miocene and lower Pliocene).

The deposits within the Saugus Newhall P-C Region that satisfy the MRZ-2 criteria are certain bedrock units of the Mint Canyon Formation, the Precambrian anorthosite-gabbro group, and portions of the Santa Clara River Valley floodplain. Portions of these deposits are currently being mined and processed for aggregate uses.

Approximately 110 square miles of the Saugus-Newhall P-C Region have been classified as MRZ-3. MRZ-3 areas located in valley and flatland regions are generally underlain by Quaternary alluvial deposits containing sand and gravel of unknown quality. MRZ-3 areas located in hilly or mountainous areas within the Saugus-Newhall P-C Region are generally underlain by Tertiary sedimentary and volcanic deposits. Portions of the anorthosite-gabbro group and Mint Canyon Formation that have been designated as MRZ-3, due to a lack of data, may offer a high potential for yielding material suitable for PCC aggregate. Parts of these two bedrock units are currently being mined for aggregate within the Saugus-Newhall P-C Region.

Within the Saugus-Newhall P-C Region, the only area classified as MRZ-4 is in the Santa Clara River floodplain, a 0.1 square-mile area at the western edge of the region. Well-log data for this area is lacking.

Local Setting

Current Site Uses

The project site is currently vacant with the exception of two single-story metal buildings, two mobile homes, former mule barns, and one drained, man-made water basin associated with the former Smiser Mule Ranch which historically occupied the site. Ruderal vegetation, grass, brush, and trees (including oak trees) cover the majority of the project site. According to the California Geologic Energy Management Division (CalGEM) Well Finder, the northern portion of the project site is within the Lyon Canyon (ABD) Oil/Gas Field. However, there are no on-site oil wells located on the project site (CalGEM 2022). There is one plugged and abandoned subsurface oil well (Sorenson 76X-4 – API 0403720828) previously operated by MACPET, located approximately 500 feet northeast of the project site (Appendix H). A California Division of Oil, Gas, and Geothermal Resources (DOGGR) Well Summary Report prepared in 1969 obtained by CalGEM indicated that drilling of the well was completed on June 23, 1969 (CalGEM 2022). The well has been inactive since October 1969 as no oil or gas was found in the well and it was categorized as a dry hole (Appendix H).

Mineral Resource Potential of Project Site

According to the Mineral Land Classification of the Greater Los Angeles Area, Part V - Special Report 143, prepared by the California Department of Conservation (DOC), Division of Mines and Geology, the project site is identified as MRZ-3. The classification of the project site has not changed in the latest update to the Mineral Land Classification Report prepared in 2021.

4.11.2 Regulatory Framework

Federal

There are no applicable federal policies or regulations related to mineral resources.

State

Surface Mining and Reclamation Act (SMARA): Public Resources Code Sections 2710, et seq.

SMARA is the primary regulator of onshore surface mining in the state. SMARA delegates specific regulatory authority to local jurisdictions. The act requires the State Geologist (California Geological Survey [CGS]) to identify all mineral deposits within the state and to identify any MRZs (i.e., MRZ-1 through MRZ-4) present. The distinctions between MRZs 1 through 4 are detailed in Section 4.11.1, above. Local jurisdictions are required to enact specific procedures to guide mineral conservation and extraction at particular sites and to incorporate mineral resource management policies into their general plans. A particular concern of state legislators in enacting SMARA was the premature loss of minerals and protection of sites threatened by development practices that might preclude future mineral extraction.

California Geological Survey Mineral Resources Project

The CGS 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 as mandated by 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. SMARA requires all cities and counties in the state to incorporate in their general plans the mapped MRZ designations approved by the State Mining and Geology Board. The classification process involves the determination of 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 those portions of the region that are urbanized or urbanizing and are classified for their aggregate content.

California Geologic Energy Management Division

CalGEM formerly the Division of Oil, Gas, and Geothermal Resources (DOGGR), oversees the drilling, operation, maintenance, and plugging and abandonment of oil, natural gas, and geothermal wells, while working to help California achieve its climate change and clean energy goals. CalGEM regulates the drilling, operation, and permanent closure of energy resource wells (DOC 2019).

California Department of Conservation Idle Well Program

Inactive and deserted oil and gas wells that are not maintained (i.e., "idle wells") can pose threats to groundwater and public safety. In 2019, CalGEM revised its idle well regulations to create more stringent testing requirements that better protect public safety and the environment from the potential threats posed by idle wells. The regulations require idle wells to be tested and, if necessary, repaired, or permanently sealed and closed. If an operator becomes insolvent or deserts their idle wells, responsibility for permanently sealing and closing these wells may fall to the state. Since 1977, CalGEM has plugged and abandoned about 1,400 wells at a cost of \$29.5 million (DOC 2022). To reduce the number of idle wells for which the state may become responsible, legislative and regulatory changes

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According to the California Public Resources Code, an idle well is defined as "...any well that for a period of 24 consecutive months has not either produced oil or natural gas, produced water to be used in production stimulation, or been used for enhanced oil recovery, reservoir pressure management, or injection. For the purpose of determining whether a well is an idle well, production or injection is subject to verification by the division" (DOC 2022).

have been made to create incentives for operators to manage and eliminate their idle wells by entering into Idle Well Management Plans (IWMPs). If an operator does not have an IWMP, the operator must pay annual idle well fees. In 2018, CalGEM collected approximately \$4.3 million in idle well fees (DOC 2022). These fees are deposited into the Hazardous and Idle-Deserted Well Abatement Fund to help fund the permanent sealing and closure of deserted wells (DOC 2022).

Local

City of Santa Clarita General Plan

The City's General Plan has been prepared pursuant to Government Code Section 65300, et seq. The County of Los Angeles and City of Santa Clarita prepared a joint planning effort concurrent with their respective General Plan update processes (i.e., Santa Clarita Valley Area Plan). As such, the document is called One Valley One Vision (OVOV) and is intended to provide focused goals, policies, and objectives to guide the regulation of development within the city.

Land Use Element

Under the land uses policies focused on Environmentally Responsible Development, the following are applicable to the project (City of Santa Clarita 2011):

- Objective LU 7.7. Protect significant mineral resources, natural gas storage facilities, and petroleum extraction facilities from encroachment by incompatible uses.
- Policy LU 7.7.1. Maintain a suitable distance and/or provide buffering to separate aggregate mining and processing activities from nearby residential uses and other uses with sensitive receptors to noise and airborne emissions.
- Policy LU 7.7.2. Avoid designating land uses in areas with significant mineral resources or utility facilities that would preclude the future extraction and use of those resources and facilities.

Conservation and Open Space Element

The following goals and policies related to mineral resources within the Conservation and Open Space Element are relevant to the project:

- Objective CO 1.3. Conserve and make more efficient use of non-renewable resource systems, such as fossil fuels, minerals, and materials.
- Goal CO 2. Conserve the Santa Clarita Valley's hillsides, canyons, ridgelines, soils, and minerals, which provide the physical setting for the natural and built environments.
 - Objective CO 2.3. Conserve areas with significant mineral resources, and provide for extraction and processing of such resources in accordance with applicable laws and land use policies.
 - Policy CO 2.3.1. Identify areas with significant mineral resources that are available for extraction pursuant to Zoning Ordinance requirements.

Policy CO 2.3.2. Consider appropriate buffers near mineral resource areas that are planned for extraction, to provide for land use compatibility and prevent the encroachment of incompatible land uses.

Policy CO 2.3.4. Ensure that mineral extraction sites are maintained in a safe and secure manner after cessation of extraction activities, which may include the regulated decommissioning of wells, clean-up of any contaminated soils or materials, closing of mine openings, or other measures as deemed appropriate by the agencies having jurisdiction.

Discussions regarding the potential for the project to conflict with the above-referenced goals and policies are detailed in Section 4.10, Land Use and Planning.

Santa Clarita Municipal Code

SCMC Section 17.38.030

The Mineral/Oil Conservation Area (MOCA) Overlay Zone is defined in SCMC § 17.38.030. The MOCA overlay zone designates areas that have a significant mineral aggregate resource and/or oil fields. The purpose is to permit the continuation of the mineral/oil usage while providing development of the area when certain environmental factors have been adequately mitigated.

4.11.3 Thresholds of Significance

The significance criteria used to evaluate the project impacts to mineral resources are based on Appendix G of the CEQA Guidelines. According to Appendix G of the CEQA Guidelines and except as provided in Public Resources Code section 21099, a significant impact to mineral resources would occur if the project would:

- 1. Result in the loss of availability of a known mineral resource that would be of future value to the region and the residents of the State.
- 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.

4.11.4 Impacts Analysis

Threshold MIN-1. Would the project result in the loss of availability of a known mineral resource that would be of future value to the region and the residents of the State?

According to the DOC, the project site is designated as MRZ-3, which is defined as areas containing mineral deposits, the significance of which cannot be evaluated from available data. The project site does not contain existing mineral resource extraction activities under existing conditions. Although the presence of mineral resources cannot be evaluated, the project site's existing and future operations would not result in the loss of availability of known mineral resources.

In addition, the CalGEM Well Finder identifies the northern portion of the project site as within the Lyon Canyon (ABD) Oil/Gas Field. However, there are no oil wells on site. Outside of this designation, there is one plugged and abandoned subsurface oil well (Sorenson 76X-4 – API 0403720828) located approximately 500 feet northeast of the project site (Appendix H). A Well Summary Report prepared in 1969 indicated that drilling of the well was completed in June 1969 and operations have been inactive since October 1969 as no oil or gas was found (CalGEM

2022; Appendix H). Given this, the well has been categorized as a dry well. Project construction and operations would not result in the loss of availability of a known mineral resource as project activities would not go beyond the site defined in Chapter 3 of this Draft EIR. Moreover, based on the proper abandonment of this off-site well with no oil or gas found, and lack of oil sumps in the vicinity of the project site, this former well in the surrounding of the project site is not expected to result in a significant environmental concern for the project site (see more discussion in Section 4.8, Hazards and Hazardous Materials, of this Draft EIR).

Therefore, due to the lack of any known significant mineral resources that would be of value to the region and the residents of the state, the project would not result in the loss of availability of a known mineral resource and **less than significant** impacts would occur. No mitigation is required.

Threshold MIN-2. Would the project result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?

The Santa Clarita Valley contains mineral resources which have been extracted historically, including gold, natural gas, and oil. Many older mines and oil wells have been abandoned, although several oil and natural gas wells are still in production. As detailed above, the project site is located on land designated as MRZ-3, which is defined as areas containing mineral deposits, the significance of which cannot be evaluated from available data (DOC 2021). As shown in Exhibit CO-2 of the Santa Clarita General Plan's Conservation and Open Space Element, the project site is not located within an existing mineral extraction area nor as a mineral resource zone. However, the project site is within the vicinity of existing mineral extraction areas in the form of estimated oil and gas fields to the north of the site, also shown on CalGEM's Well Finder map (CalGEM 2022). Policies have been included in the City's General Plan to ensure that wells are properly capped and mines sealed, and that any pollutants associated with extraction activities are remediated, in order to ensure public safety after these operations are completed (see Section 4.11.2, above). Moreover, the project site is not located within areas designated within an existing MOCA Overlay Zone as defined in SCMC § 17.38.030. Mineral extraction activities are not permitted on site under existing conditions.

Given the lack of designations, availability of known resources, and existing and proposed conditions, the project would not result in the loss of availability of a locally important mineral resource recovery site. Therefore, the project is anticipated to result in **less than significant** impacts to occur. No mitigation is required.

4.11.5 Mitigation Measures

No mitigation measures are required.

4.11.6 Level of Significance After Mitigation

Threshold MIN-1. Would the project result in the loss of availability of a known mineral resource that would be of future value to the region and the residents of the State?

Less than significant impacts related to known mineral resources of future value to the region and the residents of the State would occur. No mitigation is required.

Threshold REC-2. Would the project result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?

Less than significant impacts related to locally important mineral resource recovery sites delineated on a local general plan, specific plan, or other land use plan would occur. No mitigation is required.

4.11.7 Cumulative Effects

This section provides an analysis of cumulative impacts associated with the project and other past, present, and reasonably foreseeable future projects, as required by CEQA Guidelines Section 15130. The geographic context of the past, present, and reasonably foreseeable future projects (i.e., cumulative projects) used for this analysis are presented in Section 3.6, Related Projects.

Because the project site does not contain any mineral resources that would be considered to have value to the region and/or residents of the State, the project would not have a cumulatively considerable contribution in connection with the effects of other closely related past, present, and reasonably foreseeable projects. Therefore, the project would result in a **less than significant cumulative impact**.

Three of the related projects to the northeast of the project site are located within an area designated as MRZ-2, which is defined as areas where adequate information indicates that significant mineral deposits are present, or where it is judged that there is a high likelihood for their presence. The related project to the west is designated as MRZ-3. In addition, this related project is estimated to be located in an oil and gas field. The project site, along with this related project, are designated as MRZ-3 and have little likelihood for the presence of significant mineral resources and/or in an area with unknown mineral deposits. Unlike the project, related projects within areas designated as MRZ-2 could result in significant impacts related to the loss of availability of a known mineral resource. Moreover, these related project sites are beyond the geographic scope of impacts associated with mineral resources of a 0.25-mile radius. Thus, the project, combined with the related projects, would not 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. Given this, the project would not have a cumulatively considerable contribution when viewed in combination with the related projects. Therefore, the project would result in a **less than significant cumulative impact**.

4.11.8 References Cited

- CalGEM (California Geologic Energy Management Division). 2022, Well Finder, Ayers Well Report. Accessed October 2022. https://maps.conservation.ca.gov/doggr/wellfinder/#openModal/-118.55956/34.36844/15.
- City of Santa Clarita. General Plan, One Valley One Vision. June 2011. Accessed October 2022. https://www.codepublishing.com/CA/SantaClarita/html/SantaClaritaGP/SantaClaritaGP.html.
- DOC (Department of Conservation). 1984. Special Report 143: Mineral Land Classification of the Greater Los Angeles Area, Part V. Division of Mines and Geology. Accessed October 2022.
- DOC. 2019. Geologic Energy Management Division. Accessed October 2022. https://www.conservation.ca.gov/calgem.

- DOC. 2021. Special Report 254: Update of the Mineral Land Classification for Portland Cement Concrete Aggregate Resources in the San Fernando Valley and Saugus-Newhall Production-Consumption Regions. Accessed October 2022. https://www.conservation.ca.gov/cgs/Documents/Publications/Special-Reports/SR_254-MLC-SanFernandoValleySaugusNewhallPCR-2021-Report-a11y.pdf.
- DOC. 2021b. Special Report 254: Update of the Mineral Land Classification for Portland Cement Concrete Aggregate Resources in the San Fernando Valley and Saugus-Newhall Production-Consumption Regions: Plate 1. Accessed October 2022. https://www.conservation.ca.gov/cgs/Documents/Publications/Special-Reports/SR_254-MLC-SanFernandoValleySaugusNewhallPCR-2021-Plate01-MRZs-a11y.pdf.
- DOC. 2022. Idle Well Program. Accessed October 2022. https://www.conservation.ca.gov/calgem/idle_well.

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4.12 Noise

This section of the Environmental Impact Report (EIR) presents potential noise and vibration impacts of the proposed Wiley Canyon Project (project), which includes the environmental setting and existing ambient noise conditions, regulatory framework, potential short-term and long-term noise and vibration impacts, and proposed measures to mitigate any identified significant impacts. Information in this section is based on the Noise and Vibration Impact Study for the Wiley Canyon (Smiser Ranch) Project City of Santa Clarita, California, prepared for the applicant by ESA in October 2022 (included as Appendix J).

The Noise and Vibration Impact Study describes the ambient noise environment of the project site and vicinity on the basis of 15-minute measurements completed in vicinity of the project site; sound level measurement data can be found in Appendix B.

The Noise and Vibration Impact Study evaluates the proposed tentative map; the Federal Highway Administration (FHWA) Roadway Construction Noise Model (RCNM) and the FHWA Traffic Noise Model (TNM) were used to estimate project noise emissions, with consideration of the California Department of Transportation (CalTrans) *Technical Noise Supplement to the Traffic Noise Analysis Protocol* (Caltrans 2013), and Federal Transit Authority (FTA) *Transit Noise And Vibration Impact Assessment* (FTA 2006). Other sources consulted are listed in Section 4.12.8, References Cited.

4.12.1 Environmental Setting

This section provides background information on acoustics and vibration to assist the reader with the analysis presented, describes the existing conditions in the project area and identifies the resources that could be affected by the project.

Acoustic and Vibration Fundamentals—Noise Terminology and Characteristics

Sound, Noise, and Acoustics

Sound can be described as the mechanical energy of a vibrating object transmitted by pressure waves through a liquid or gaseous medium (e.g., air) to a hearing organ, such as a human ear. Noise is defined as loud, unexpected, or annoying sound. In the science of acoustics, the fundamental model consists of a sound (or noise) source, a receptor, and the propagation path between the two. The loudness of the noise source and obstructions or atmospheric factors affecting the propagation path to the receptor determine the sound level and characteristics of the noise perceived by the receptor. The field of acoustics deals primarily with the propagation and control of sound.

Frequency

Continuous sound can be described by frequency (pitch) and amplitude (loudness). A low-frequency sound is perceived as low in pitch. Frequency is expressed in terms of cycles per second, or Hertz (Hz) (e.g., a frequency of 250 cycles per second is referred to as 250 Hz). High frequencies are sometimes more conveniently expressed in kilohertz (kHz), or thousands of Hertz. The audible frequency range for humans is generally between 20 Hz and 20,000 Hz.

Sound Pressure Levels and Decibels

The amplitude of pressure waves generated by a sound source determines the loudness of that source. Sound pressure amplitude is measured in micro-Pascals (mPa). One mPa is approximately one hundred billionth (0.000000001) of normal atmospheric pressure. Sound pressure amplitudes for different kinds of noise environments can range from less than 100 to 100,000,000 mPa. Because of this huge range of values, sound is rarely expressed in terms of mPa. Instead, a logarithmic scale is used to describe sound pressure level (SPL) in terms of decibels (dB). The threshold of hearing for young people is about 0 dB, which corresponds to 20 mPa.

Addition of Decibels

Because decibels are logarithmic units, sound pressure level (SPL) cannot be added or subtracted through ordinary arithmetic. Under the decibel scale, a doubling of sound energy corresponds to a 3 dB increase. In other words, when two identical sources are each producing sound of the same loudness, the resulting sound level at a receptor equidistant to each sound source would be 3 dB higher than one source under the same conditions. For example, if one automobile produces an SPL of 70 dB when it passes an observer, two cars passing simultaneously would not produce 140 dB—rather, they would combine to produce 73 dB. Under the decibel scale, three sources of equal loudness together produce a sound level 5 dB louder than one source.

A-Weighted Decibels

The decibel scale alone does not adequately characterize how humans perceive noise. The dominant frequencies of a sound have a substantial effect on the human response to that sound. Although the intensity (energy per unit area) of the sound is a purely physical quantity, the loudness or human response is determined by the characteristics of the human ear.

Human hearing is limited in the range of audible frequencies as well as in the way it perceives the SPL in that range. In general, people are most sensitive to the frequency range of 1,000–8,000 Hz, and perceive sounds within that range better than sounds of the same amplitude in higher or lower frequencies. To approximate the response of the human ear, sound levels of individual frequency bands are weighted, depending on the human sensitivity to those frequencies. Then, an "A-weighted" sound level (expressed in units of dBA) can be computed based on this information.

The A-weighting network approximates the frequency response of the average young ear when listening to most ordinary sounds. When people make judgments of the relative loudness or annoyance of a sound, their judgments correlate well with the A-scale sound levels of those sounds. Other weighting networks have been devised to address high noise levels or other special problems (e.g., B-, C-, D-, and G-scales), but these scales are rarely used in conjunction with highway traffic noise or stationary noise sources (i.e., mechanical equipment) in an outdoor environment that contribute to community noise levels. Noise levels for environmental noise reports are typically reported in terms of A-weighted decibels (dBA). Table 4.12-1, Typical Noise Levels Associated with Common Activities, arranges typical outdoor and indoor noise sources against a decreasing linear scale of A-weighted sound levels, and provides examples of common noise levels in the indoor and outdoor environment.

Table 4.12-1. Typical Noise Levels Associated with Common Activities

Common Outdoor Activities	Noise Level (dBA)	Common Indoor Activities
_	110	Rock Band
Jet Flyover at 1,000 feet	105	_
Gas Lawn Mower at three feet	95	_
Diesel Truck at 50 feet, 50 mph	85	Food Blender at 3 feet
_	80	Garbage Disposal at 3 feet
Noisy Urban Area, Daytime	75	_
_	70	Vacuum Cleaner at 10 feet
Commercial Area	65	Normal speech at 3 feet
Heavy Traffic at 300 feet	60	-
-	55	Large Business Office
Quiet Urban Daytime	50	Dishwasher (in next room)
Quiet Urban Nighttime	40	Theater, Large Conference Room (background)
Quiet Suburban Nighttime	35	_
_	30	Library
Quiet Rural Nightime	25	Bedroom at Night, Concert Hall (background)
	15	Broadcast/Recording Studio
Lowest Threshold of Human Hearing (Healthy)	0	Lowest Threshold of Human Hearing (Healthy)

Source: Caltrans 2013.

Notes: dBA = A-weighted decibel; mph = miles per hour.

Several descriptors of noise (noise metrics) exist to help predict average community reactions to the adverse effects of environmental noise, including traffic-generated noise. These descriptors include the equivalent noise level over a given period (L_{eq}), the day-night average noise level (L_{dn}), and the community noise equivalent level (CNEL). Each of these descriptors uses units of dBA.

 L_{eq} is a decibel quantity that represents the constant or energy-averaged value equivalent to the amount of variable sound energy received by a receptor during a time interval. For example, a one-hour L_{eq} measurement of 60 dBA would represent the average amount of energy contained in all the noise that occurred in that hour. L_{eq} is an effective noise descriptor because of its ability to assess the total time-varying effects of noise on sensitive receptors, which can then be compared to an established L_{eq} standard or threshold of the same duration. Another descriptor is maximum sound level (L_{max}), which is the greatest sound level measured during a designated time interval or event. The minimum sound level (L_{min}) is often called the floor of a measurement period. L_n represents a statistical or percentile noise level, where 'n' is the percent exceeded noise level over a designated time interval or event. For example, L_{50} is the level exceeded for 50% of the time; it is statistically the mid-point of the noise readings, or the median noise level during the designated period.

Unlike the L_{eq} , L_{max} , and L_{min} metrics, L_{dn} and CNEL descriptors always represent 24-hour periods and differ from a 24-hour L_{eq} value because they apply a time-weighted factor designed to emphasize noise events that occur during the non-daytime hours (when speech and sleep disturbance is of more concern). *Time weighted* refers to the fact that L_{dn} and CNEL penalize noise that occurs during certain sensitive periods. In the case of CNEL, noise occurring during the daytime (7:00 AM to 7:00 PM) receives no penalty. Noise during the evening (7:00 PM to 10:00 PM) is

penalized by adding five dB to each of the hourly L_{eq} values, and nighttime (10:00 PM to 7:00 AM) noise is penalized by adding 10 dB to each of the hourly L_{eq} values. L_{dn} differs from CNEL in that the daytime period is longer (defined instead as 7:00 AM to 10:00 PM), thus eliminating the dB adjustment for the evening period. L_{dn} and CNEL are the predominant criteria used to measure environmental noise affecting residential receptors. These two metrics generally differ from one another by no more than 0.5 to one dB and are often considered or actually defined as being essentially equivalent by many jurisdictions.

Regarding increases or decreases to the outdoor ambient noise environment, changes in a community noise level of less than 3 dBA are not typically noticed by the human ear, while changes from 3 to 5 dBA may be noticed by some individuals who are extremely sensitive to changes in noise; a 5 dBA increase is readily noticeable (Caltrans 2013). The human ear perceives a 10 dBA increase in sound level as a doubling of the sound level (i.e., 65 dBA sounds twice as loud as 55 dBA to a human ear). The Federal Interagency Committee on Noise (FICON) developed guidance to be used for the assessment of project-generated permanent increases in noise levels that consider the ambient noise level. The FICON recommendations are based on studies that relate aircraft noise levels to the percentage of persons highly annoyed by aircraft noise. Although the FICON recommendations were specifically developed to assess aircraft noise impacts, these recommendations are often used in environmental noise impact assessments involving the use of cumulative noise exposure metrics, such CNEL and Leq. Per FICON, in areas where the without project noise levels range from 60 to 70 dBA, a 3 dBA *barely perceptible* noise level increase appears to be appropriate for most people, and for this EIR, the City has chosen to apply this increase as the significance threshold for permanent increases to community noise levels resulting from the Project, including on-site noise sources and Project contributions to off-site traffic noise in the community.

Exterior Noise Distance Attenuation

Noise sources are classified in two forms: (1) point sources, such as stationary equipment or a group of construction vehicles and equipment working within a spatially limited area at a given time, and (2) line sources, such as a roadway with a large number of pass-by sources (motor vehicles). Sound generated by a point source typically diminishes (attenuates) at a rate of 6.0 dBA for each doubling of distance from the source to the receptor at acoustically "hard" sites and at a rate of 7.5 dBA for each doubling of distance from source to receptor at acoustically "soft" sites. Sound generated by a line source (i.e., a roadway) typically attenuates at a rate of 3 dBA and 4.5 dBA per doubling distance, for hard and soft sites, respectively. Sound levels can also be attenuated by man-made or natural barriers. For the purpose of sound attenuation discussion, a "hard" or reflective site does not provide any excess ground-effect attenuation and is characteristic of asphalt or concrete ground surfaces, as well as very hard-packed soils. An acoustically "soft" or absorptive site is characteristic of unpaved loose soil or vegetated ground.

Health Effects of Noise

Excessively noisy conditions can affect an individual's quality of life, health, and well-being. The effects of noise can be organized into six broad categories: sleep disturbance, permanent hearing loss, human performance and behavior, social interaction or communication, extra-auditory health effects, and general annoyance. An individual's reaction to noise and its level of disturbance depends on many factors such as the source of the noise, its loudness relative to the background noise level, time of day, whether the noise is temporary or permanent, and subjective sensitivity.

Vibration Terminology and Characteristics

Vibration is oscillatory movement of mass (typically a solid) over time. It is described in terms of frequency and amplitude and, unlike sound, can be expressed as displacement, velocity, or acceleration. For environmental studies, vibration is often studied as a velocity that, akin to the discussion of sound pressure levels, can also be expressed in dB as a way to cast a large range of quantities into a more convenient scale. Vibration impacts to buildings are generally discussed in terms of inches per second (ips) peak particle velocity (PPV), which will be used herein to discuss vibration levels for ease of reading and comparison with relevant standards. Vibration can also be annoying and thereby impact occupants of structures, and vibration of sufficient amplitude can disrupt sensitive equipment and processes, such as those involving the use of electron microscopes and lithography equipment. Consequently, land uses that are considered to be vibration sensitive include residences (due to the potential for annovance), medical and research (due to the potential for interference with surgical procedures or high precision analytical equipment), and historic structures that are constructed of fragile materials (due to the potential for structural damage). Common sources of vibration within communities include construction activities and railroads. Groundborne vibration generated by construction projects is usually highest during pile driving, rock blasting, soil compacting, jack hammering, and demolition-related activities where sudden releases of subterranean energy or powerful impacts of tools on hard materials occur. Depending on their distances to a sensitive receptor, operation of large bulldozers, graders, loaded dump trucks, or other heavy construction equipment and vehicles on a construction site also have the potential to cause high vibration amplitudes. As with travel of sound waves through air, vibration waves traveling through the ground attenuate with increasing distance from the source.; however, the energy associated with a vibration wave in the ground dissipates more quickly with distance, as compared to sound waves in the air. The maximum vibration level standard used by the California Department of Transportation (Caltrans) (Appendix J) for the prevention of structural damage to typical residential buildings is 0.3 ips PPV.

Existing Noise Conditions

The project site consists of two parcels (APNs 2825-012-010 and 2825-012-011) that historically used for agricultural uses but are currently unused. A portion of the South Fork of the Santa Clara River runs along the eastern boundary of the property with the north end of the drainage being channelized. The project site is predominantly vacant with no known on-site structures, but includes fencing, an abandoned water tank, water wells, irrigation lines, Southern California Edison (SCE) electrical distribution lines, and dirt roads. Existing land uses in the immediate vicinity of the project site include residential uses to the north and to the east, a small commercial area to the south, and the Interstate 5 (I-5) freeway to the west. With respect to noise, sensitive receptors are defined as any land use where exposure to elevated noise levels would cause disruption of normal activities or interfere with enjoyment of the property; noise-sensitive uses are generally defined to include residences, schools, hospitals, and places of assembly.

Ambient Noise Survey

Sound pressure level (SPL) measurements were conducted near the project site on March 4, 2021, to quantify and characterize the existing outdoor ambient noise levels. Table 4.12-2 provides the location, duration, and date at which these baseline noise level measurements were taken. The SPL measurements were performed using a Larson-Davis 820 Precision Integrated Sound Level Meter (SLM). This SLM meets the current American National Standards Institute (ANSI) standard for a Type 1 (Precision Grade) instrument. The SLMs were calibrated and operated according to the manufacturer's written specifications and the measurements were conducted with the microphone positioned at a height of 5 feet above the ground.

As detailed in Table 4.12-2, five short-term noise level measurement locations (R1-R5) that represent the ambient noise environment at or in the vicinity of the nearby noise sensitive receptors were selected within and adjacent to the project site boundaries. These noise measurement locations are depicted on Figure 4.12-1, Ambient Noise Monitoring and Construction Noise Modeling Locations.

The L_{eq} noise levels measured at these locations are provided in Table 4.12-2, Ambient Noise Measurements. The primary noise sources at the sites identified in Table 4.12-2 consisted of traffic noise from I-5 and other local streets. The measured existing ambient sound levels at R1-R5 ranged from approximately 57.7 dBA L_{eq} at R1 to 70.0 dBA L_{eq} at R5.

Table 4.12-2. Ambient Noise Measurements

Receptor	Location/Address	Date	Time	Duration	L _{eq} (dBA)
R1	to the north of the project site at the south end of existing residential uses along Hawkbryn Avenue between I-5 and The Old Road		9:36 AM to 9:51 AM	15 minutes	57.7
R2	at a residence along Old Wiley Canyon Road to the northeast of the project site		9:58 AM to 10:13 AM	15 minutes	66.1
R3	at a residence along Wiley Canyon Road to the east of the project site, near Fouri Road and Carland Drive	March 4, 2021	8:26 AM to 8:41 AM	15 minutes	62.6
R4	at a residence along Wiley Canyon Road to the southeast of the project site, near Fouri Road and Canewell Drive	2021	8:49 AM to 9:04 AM	15 minutes	67.2
R5	at the south end of the project site, north of Calgrove Boulevard and east of I-5, adjacent to Santa Clarita Athletic Club and Survival of the Fittest Health and Wellness		9:10 AM to 9:25 AM	15 minutes	70.0

Source: Appendix J

Notes: Leq = equivalent continuous sound level (time-averaged sound level); dBA = A-weighted decibels.

Project Design Features

The following Project Design Feature (PDF) measures apply to the proposed project and will help to reduce and avoid potential impacts related to noise. Pursuant to SCMC section 11.44.080, no person may engage in any construction work that requires a building permit from the City on sites within 300 feet of a residentially zoned property, except between the hours of 7:00 AM and 7:00 PM, Monday through Friday, and 8:00 AM and 6:00 PM on Saturday. No work may be performed on the following public holidays: New Year's Day, Independence Day, Thanksgiving, Christmas Day, Memorial Day, and Labor Day. The City of Santa Clarita Public Works Department may issue a permit for work to be done "after hours" provided that containment of construction noises is provided.

PDF-NOI-1 Before the Building Official issues grading permits, the applicant must incorporate the following measures as a note on the grading plan cover sheet to ensure that the greatest distance between noise sources and sensitive receptors during construction activities have been achieved.

- Construction equipment, fixed or mobile, must be equipped with properly operating and maintained noise mufflers consistent with manufacturers' standards.
- Construction staging areas must be located away from off-site sensitive uses during project construction.
- The project contractor must place all stationary construction equipment so that emitted noise is directed away from sensitive receptors nearest the project site, whenever feasible.

4.12.2 Regulatory Framework

Federal

The Noise Control Act of 1972 establishes a national policy to promote an environment for all Americans to be free from noise that jeopardizes their health and welfare.

Information on Levels of Environmental Noise Requisite to Protect Health and Welfare with an Adequate Margin of Safety, commonly referenced as the "Levels Document," establishes an Ldn of 55 dBA ("A-weighted decibel") as the requisite level, with an adequate margin of safety, for areas of outdoor uses, including residences and recreation areas (EPA 1974). This document identifies safe levels of environmental noise exposure without consideration of costs for achieving these levels or other potentially relevant considerations.

Federal Highway Administration

The purpose of the Federal Highway Administration (FHWA) Noise Abatement Procedure is to provide procedures for noise studies and noise abatement measures to help protect the public health and welfare, supply noise abatement criteria, and establish requirements for information to be given to local officials for use in the planning and design of highways. It establishes five categories of noise-sensitive receptors and prescribes the use of the hourly Leq as the criterion metric for evaluating traffic noise impacts.

Department of Housing and Urban Development (HUD)

The Department of Housing and Urban Development regulations set forth the following exterior noise standards for new home construction assisted or supported by the department:

- 65 L_{dn} or less Acceptable
- 65 L_{dn} and < 75 Ldn Normally unacceptable, appropriate sound attenuation measures must be provided
- > 75 L_{dn} Unacceptable

HUD's regulations do not contain standards for interior noise levels. Rather a goal of 45 dBA is set forth, and attenuation requirements are geared to achieve that goal.

Occupational Safety and Health Administration

The Occupational Safety and Health Administration (OSHA) Occupation Noise Exposure Hearing Conservation Amendment (provides that protection against the effects of noise exposure must be provided for employees when sound levels exceed 90 dBA over an 8 hour exposure period. Protection consists of feasible administrative or engineering controls. If such controls fail to reduce sound levels to within acceptable levels, personal protective equipment shall be provided and used to reduce exposure of the employee. Additionally, a Hearing Conservation Program must be instituted by the employers whenever employee noise exposure equals or exceeds the action level of an 8-hour time-weighted average sound level of 85 dBA. The Hearing Conservation Program requirements consist of periodic area and personal noise monitoring, performance and evaluation of audiograms, provision of hearing protection, annual employee training, and record keeping.

Federal Transit Administration and California Department of Transportation

The criteria for environmental impact from groundborne vibration are based on the maximum levels for a single event. Table 4.12-3 lists the potential vibration damage criteria associated with construction activities, as suggested in the *Transit Noise and Vibration Impact Assessment* (FTA 2006). FTA guidelines show that a vibration level of up to 102 VdB (equivalent to 0.5 inch/sec in RMS) (FTA 2006) is considered safe for buildings consisting of reinforced concrete, steel, or timber (no plaster), and would not result in any construction vibration damage. For a non-engineered timber and masonry building, the construction vibration damage criterion is 94 VdB (0.2 inch/sec in RMS).

Table 4.12-3. Construction Vibration Damage Criteria

Building Category	PPV (inch/sec)	Approximate L _v a
Reinforced-concrete, steel or timber (no plaster)	0.50	102
Engineered concrete and masonry (no plaster)	0.30	98
Non-engineered timber and masonry buildings	0.20	94
Buildings extremely susceptible to vibration damage	0.12	90

Source: Federal Transit Administration. Table 12-3, Transit Noise and Vibration Impact Assessment (2006).

Notes: PPV = peak particle velocity; L_v = velocity in decibels; inch/sec = inches per second

Based on Table 4.12-3 in the FTA's *Transit Noise and Vibration Impact Assessment* (FTA 2006), interpretation of vibration criteria for human annoyance is 78 VdB for residential uses during daytime hours. During nighttime hours, the human annoyance vibration criterion is 72 VdB. For office and office buildings, the FTA guidelines suggest that a human annoyance vibration level of 84 VdB should be used for detailed analysis.

State

California Code of Regulations (CCR) Title 24 includes the California Building Standards Code (CBSC). The most recent building standard adopted by the legislature and used throughout the state is the 2022 version, which took effect on January 1, 2023. The State of California's noise insulation standards are codified in the CBSC (Title 24, Part 2, Chapter 12). These noise standards are for new construction in California for the purposes of interior compatibility with exterior noise sources. The regulations specify that acoustical studies must be prepared when noise-sensitive structures, such as residences, schools, or hospitals, are near major transportation noises, and where such noise sources create an exterior noise level of 60 dBA CNEL, or higher. Acoustical studies that

a Root-mean-square velocity in decibels (VdB) re 1 microinch per second.

accompany building plans must demonstrate that the structure has been designed to limit interior noise in habitable rooms to acceptable noise levels. For new residential buildings, schools, and hospitals, the acceptable interior noise limit for new construction is 45 dBA CNEL.

The RMS values for building damage thresholds referenced above in Table 4.12-3 are shown in Table 4.12-4, which is taken from the *Transportation and Construction Vibration Guidance Manual* (Caltrans 2013).

Table 4.12-4. Guideline Vibration Damage Potential Threshold Criteria

	Maximum PPV (inch/sec)		
Structure and Condition	Transient Sourcesa	Continuous/Frequent Intermittent Sources ^b	
Extremely fragile historic buildings, ruins, ancient monuments	0.12	0.08	
Fragile buildings	0.20	0.10	
Historic and some old buildings	0.50	0.25	
Older residential structures	0.50	0.30	
New residential structures	1.00	0.50	
Modern industrial/commercial buildings	2.00	0.50	

Source: California Department of Transportation. Table 19, *Transportation and Construction Vibration Guidance Manual* (2013). **Notes:** PPV = peak particle velocity; inch/sec = inches per second

City of Santa Clarita

Noise Element of the General Plan

The City of Santa Clarita has set land use standards for noise in its General Plan Noise Element (2011). One of the goals of the Noise Element is to mitigate, and if possible prevent, significant noise levels in residential neighborhoods. It requires that developers of new single-family and multi-family residential neighborhoods in areas where the ambient noise level exceeds 55 dBA (night) and 65 dBA (day) (or the equivalent of 65 dBA CNEL) provide mitigation measures for the new residences to reduce interior noise levels. Medical office buildings are acceptable in areas up to 70 dBA CNEL where no outdoor active uses are proposed and the interior noise levels are mitigated.

Municipal Code Noise Ordinance

SCMC Chapter 11.44, Noise Limits, governs noise standards in various land use zones during daytime (7:00 AM–10:00 PM) and nighttime (10:00 PM–7:00 AM) periods. For residential zones, the base noise levels are 65 dBA during the daytime period and 55 dBA during the nighttime period. For commercial and manufacturing zones, the base noise levels are 80 dBA during the daytime period and 70 dBA during the nighttime period. For repetitive impulsive noise or steady, whine, screech, or hum noise, the base noise levels noted above are reduced by 5 dBA. If the noise occurs more than 5 but less than 15 minutes per hour during the daytime period, the above base noise levels are raised by 5 dBA. If the noise occurs more than 1 but less than 5 minutes per hour during the daytime period, the above base noise levels are raised by 10 dBA. If the noise occurs less than 1 minute per hour during daytime period, the above base noise levels are raised by 20 dBA.

^a Transient sources create a single, isolated vibration event, such as blasting or drop balls.

Continuous/frequent intermittent sources include impact pile drivers, pogo-stick compactors, crack-and-seat equipment, vibratory pile drivers, and vibratory compaction equipment.

SCMC Section 11.40.040 sets the following noise levels for residential, commercial, and manufacturing uses taking place on private property and for construction activities on private property outside of the hourly limits provided in SCMC Section 11.40.080. The levels are shown in Table 4.12-5, City Noise Limits.

Table 4.12-5. City Noise Limits

Region	Time	Exterior Sound Level (dB)
Residential Zone	Day	65
Residential Zone	Night	55
Commercial and Manufacturing	Day	80
Commercial and Manufacturing	Night	70

Source: City of Santa Clarita

Notes: Wherever a boundary line occurs between a residential property and a commercial/manufacturing property, the noise level of the quieter zone is to be used. Section 11.44.070

Pursuant to SCMC section 11.44.080, no person may engage in any construction work that requires a building permit from the City on sites within 300 feet of a residentially zoned property, except between the hours of 7:00 AM and 7:00 PM, Monday through Friday, and 8:00 AM and 6:00 PM on Saturday. No work may be performed on the following public holidays: New Year's Day, Independence Day, Thanksgiving, Christmas Day, Memorial Day, and Labor Day. The City of Santa Clarita Public Works Department may issue a permit for work to be done "after hours" provided that containment of construction noises is provided.

For planning purposes, the 24-hour average sound levels (CNEL) are roughly equivalent to L_{eq} measurements plus 5 dBA when traffic is the dominant noise source (Appendix J).

4.12.3 Thresholds of Significance

Consistent with Appendix G of the CEQA Guidelines and the City's General Plan and Municipal Code, a significant impact would occur if development of the proposed project would result in any of the following:

- Generate 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;
- 2. Generate excessive groundborne vibration or groundborne noise levels; and
- 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, expose people residing or working in the project area to excessive noise levels.

With regard to Threshold 3, the proposed project would result in no impacts relevant to airport land use plans, airports, or private airstrips because there are no airports airstrips or airport land use plans within the vicinity of the project site; therefore, these issues do not require further analysis in this study.

4.12.4 Impact Analysis

Threshold NOI-1. Would the project result in 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 County General Plan or noise ordinance (City of Santa Clarita Municipal Code, Chapter 11.44), or applicable standards of other agencies?

For project construction, typical construction equipment noise levels recommended for noise impact assessments, based on a distance of 50 feet between the equipment and a noise receptor, are taken from the FHWA Roadway Construction Noise Model (RCNM) (FHWA 2006).

During operation of the project, noise generated from offsite mobile noise sources such as vehicular traffic is assessed with the Federal Highway Administration (FHWA) approved traffic noise source modeling guidelines. For stationary sources, equipment source noise levels obtained from past project experience and commercially available information are used for the impact analysis.

Construction Noise

This section includes an overview of the typical methods, equipment, and work force that would be used for construction of the proposed project. Unless otherwise noted, construction activities are anticipated to occur between the hours of 7:00 AM and 7:00 PM, Monday through Friday, consistent with the City of Santa Clarita Noise Ordinance. If construction is required on one or more Saturdays, construction activities will be limited to the hours between 8:00 AM and 5:00 PM, also consistent with the Noise Ordinance.

Typical Construction Equipment

Short-term noise impacts would be associated with excavation, grading, paving, and underground construction during construction of the proposed project. Construction-related short-term noise levels would be higher than existing ambient noise levels in the project area today but would no longer occur once construction of the project is completed.

Construction crew commutes and the transport of construction equipment and materials to the site for the proposed project would incrementally increase noise levels on access roads leading to the site. Although there would be a relatively high single-event noise-exposure potential causing intermittent noise nuisance (passing trucks at 50 feet would generate up to a maximum of 87 dBA L_{max} for a short period of time, usually seconds), the effect on longer-term (hourly or daily) ambient noise levels would be small after averaging with lower ambient noise in the absence of truck noise. Therefore, short-term construction-related impacts associated with worker commute and equipment transport to the project site would be **less than significant**.

The second type of short-term noise impact is related to noise generated during site preparation and onsite construction on the project site. Construction is completed in discrete steps, each of which has its own mix of equipment, and consequently, its own noise characteristics. These various sequential phases would change the character of the noise generated on the site, and therefore, the noise levels surrounding the site as construction progresses. Despite the variety in the type and size of construction equipment, similarities in the dominant noise sources and patterns of operation allow construction-related noise ranges to be categorized by work phase. Table 4.12-6 lists a variety of typical construction equipment noise levels recommended for noise impact assessments, based on a distance of 50 feet between the equipment and a noise receptor, taken from the FHWA Roadway Construction Noise Model (RCNM) (FHWA 2006).

Table 4.12-6. Typical Construction Equipment RCNM Default Noise Emission Reference Levels and Usage Factors

Equipment Description	Impact Device	Acoustical Usage Factor	Spec. 721.560 L _{max} at 50 feet (dBA, slow)	Actual Measured L L _{max} at 50 feet (dBA, slow)	Number of Actual Data Samples (Count)
Air compressor	No	40	80	78	18
Backhoe	No	40	80	78	372
Concrete pump truck	No	20	82	81	30
Grader	No	40	85	N/A	0
Crane	No	16	85	81	405
Dump Truck	No	40	84	76	31
Dozer	No	40	85	82	405
Generator	No	50	82	81	19
Front End Loader	No	40	80	79	96
Paver	No	50	85	77	9
Pneumatic tools	No	50	85	85	90
Pumps	No	50	77	81	17

Source: FTA 2006

Note: L_{max} = maximum sound level; dBA = A-weighted decibels; N/A = not applicable

Construction Phasing

The overall construction duration for this project would be four years and four months. The initial construction phase would consist of 16 months of "horizontal" work (e.g., grading, bank stabilization, utilities, master developer improvements), which would be followed by 18 months for construction of the senior living facility (work on the other residential buildings occurring at the same time) and initial construction of the apartments. The senior living facility would be occupied for about 18 months while construction continues on the additional residential (and commercial) buildings. Building construction adjacent to the senior living facility would occur first such that the later 12 months of construction would occur to the south with at least partially construction buildings in between. While the senior facility would be exposed to 18 months of construction in areas adjacent to the Senior Facility on the project site, the residential structures would be in place at the north end and offer shielding for construction noise from the north.

Project construction would constitute 8 phases, as shown in Table 4.12-7, Construction Phasing. Individual pieces of heavy-duty off-road construction equipment that would be used for construction of the project would generate maximum noise levels of 73 dBA to 90 dBA L_{max} at a reference distance of 50 feet from the noise source, as shown in Table 4.12-6. The construction equipment noise levels at a distance of 50 feet (Referenced Maximum Noise Levels) are based on the FHWA RCNM User's Guide 14 which is a technical report containing actual measured noise data for construction equipment. Typical operating cycles for these types of construction equipment may involve 1 or 2 minutes of full-power operation followed by 3 or 4 minutes at lower power settings. While the operating cycles may involve 1 or 2 minutes of full power operation (generating the maximum sound levels identified in Table 4.12-6), the equipment would be moving around and would not stay at a specific location for the entire cycle. Therefore, adjacent receivers would be exposed to the maximum noise level intermittently rather than continuously.

Table 4.12-7. Construction Phasing

Phase	Description
Phase 1	Demolition
Phase 2	Site Preparation
Phase 3	Grading/Excavation
Phase 4	Drainage/Utilities/Sub-grade
Phase 5	Foundation/Concrete Pour
Phase 6	Building Construction
Phase 7	Paving
Phase 8	Architectural Coating

Source: Appendix B

Note: L_{max} = maximum sound level; dBA = A-weighted decibels.

Existing noise sensitive uses (residences) in the immediate vicinity include:

- North 330 feet or more
- East 130 feet or more

As stated previously, 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. For a single point source, sound levels decrease approximately 6 dBA for each doubling of distance from the source. This drop-off rate is appropriate for noise generated by stationary equipment. If noise is produced by a line source, such as highway traffic or railroad operations, the sound decreases 3 dBA for each doubling of distance in a hard site environment. Line source noise in a relatively flat environment with absorptive vegetation decreases 4.5 dBA for each doubling of distance. Each of these existing residential uses are located 100 feet or more from the project site boundary (which translates to a -6 dBA reduction relative to the noise level at 50 feet).

Table 4.12-8, Estimated Construction Noise Levels at Existing Off-Site Sensitive Receptors, lists the estimated construction noise levels at the representative off-site sensitive uses to the east and north of the project site where the nearest noise-sensitive receivers are located. Figure 4.12-1 shows these off-site noise modeling locations.

Table 4.12-8. Estimated Construction Noise Levels at Existing Off-Site Sensitive Receptors

Noise Sensitive Receptor	Construction Phases	Distance between Nearest Receptor and Construction Site (feet)	Estimated Construction Noise Levels at Noise Sensitive Receptor by Construction Phase, ^a Hourly L _{eq} (dBA)
R1	Demolition		84
Existing residences to	Site preparation		83
the north of the project	Grading/Excavation		83
site, along Hawkbryn	Drainage/Utilities/Sub-grade		81
Avenue near Wiley	Foundation/Concrete Pour	50 to 600 feet	88
Canyon Road	Building Construction		86
	Paving		79
	Architectural Coating		78
	Maximum Overlap Noise		88.8

Table 4.12-8. Estimated Construction Noise Levels at Existing Off-Site Sensitive Receptors

Noise Sensitive Receptor	Construction Phases	Distance between Nearest Receptor and Construction Site (feet)	Estimated Construction Noise Levels at Noise Sensitive Receptor by Construction Phase, ^a Hourly L _{eq} (dBA)
R2 Existing residences to the northeast of the project site, along Old Wiley Canyon Road on the east side of Wiley Canyon Road	Demolition Site preparation Grading/Excavation Drainage/Utilities/Sub-grade Foundation/Concrete Pour Building Construction Paving Architectural Coating Maximum Overlap Noise	50 to 800 feet	72 71 73 80 88 86 78 78 78
R3 Existing residences to the east of the project site, along Wiley Canyon Road near Fourl Road	Demolition Site preparation Grading/Excavation Drainage/Utilities/Sub-grade Foundation/Concrete Pour Building Construction Paving Architectural Coating Maximum Overlap Noise	100 to 600 feet	78 78 79 81 88 86 78 78 78
R4 Existing residences to the southeast of the project site, along Wiley Canyon Road near Canerwell Street	Demolition Site preparation Grading/Excavation Drainage/Utilities/Sub-grade Foundation/Concrete Pour Building Construction Paving Architectural Coating Maximum Overlap Noise	100 to 800 feet	78 78 79 81 88 86 78 78 88.7
R5 Existing residences to the south of the project site, along Calgrove Boulevard near La Salle Canyon Drive	Demolition Site preparation Grading/Excavation Drainage/Utilities/Sub-grade Foundation/Concrete Pour Building Construction Paving Architectural Coating Maximum Overlap Noise	300 to 1,200 feet	70 69 71 80 88 86 77 78 88.6

Source: Appendix J **Notes:**

As shown in Table 4.12-8, the grading phase of construction on the project site would expose the nearest noise-sensitive uses in the project vicinity to noise levels reaching up to 89 dBA Leq over a period of one hour for the

Estimated construction noise levels represent the worst-case condition when noise generators are located closest to the receptors and are expected to last the entire duration of each construction phase.

existing residences to the north, northeast, east, and southeast in the project vicinity. During other construction phases, noise associated with on-site activity would be lower than those during the grading period.

During the City's permitted construction hours, project construction would result in noise levels at adjacent sensitive receiver locations exceeding the ambient noise (57.7 to 70 dBA L_{eq}) plus 5 dBA (62.7 to 77 dBA L_{eq}) significance threshold constituting a **potentially significant temporary noise impact**. Mitigation measures are required to address this impact including stand-alone construction noise barriers and limiting construction equipment within 200 feet of the northern and eastern boundary of the project site to small, reduced-noise equipment. Refer to Section 4.12.6 for discussion of these required mitigation measures.

Compliance with SCMC section 11.44.080 would allow the project to be in conformance with required noise construction restrictions. Because construction noise is temporary and would cease to occur after completion of the project construction, exceptions to the City's standards in the SCMC may be requested for construction-related events, which would be considered by the City's Director of Building and Safety.

Potential Future Phase Construction Noise Impacts on Residential Uses Constructed and Occupied in Past Phases

The senior living facility would be occupied for approximately 18 months while construction continues on the additional residential (and commercial) buildings at the project site. Based on the preliminary site plan, the Senior Living building is approximately 50 feet from the construction area of other residential buildings. Once these nearest residential buildings have been constructed, they would function as barriers shielding construction activity in areas beyond these residential buildings nearest to the Senior Living building. Based on Table 4.12-8, construction noise would reach a maximum of 88.8 dBA Leq at a receiver as close as 50 feet to the construction area thereby resulting in a **potentially significant** impact. Therefore, mitigation measures are required to protect receivers at R1 and R2. These measures would be applicable to the Senior Living residences during the later phases construction when the residential buildings nearest to the Senior Living building are being constructed.

Project Operations Noise

This section describes the activities relating to operation of the proposed project, including project-related vehicular traffic and any onsite noise-generating equipment and activity.

Traffic Noise Impacts on Off-Site Land Uses

To characterize the project area's future day/night noise environment, the noise levels attributed to future traffic volumes on local roadways were estimated using a spreadsheet model developed based on the methodologies provided in FHWA Traffic Noise Model (TNM) Technical Manual. In addition, the Caltrans Technical Noise Supplement (TeNS) document states that the peak hour traffic noise level would be equivalent to the Ldn level based on the assumptions of (1) the peak hour traffic volume would be 10 percent of the average daily traffic volume, and (2) the split of daytime and nighttime average daily traffic volume is 85/15 percent. Further, the CNEL level would be 0.3 dBA higher than L_{dn} level based on the assumption of 80 percent in daytime and 5 percent in evening time.

Table 4.12-9, Existing Baseline Roadway Noise Levels, lists the existing baseline traffic noise levels. Table 4.12-10, Existing Roadway with Project Noise Levels, lists the existing baseline plus project traffic noise levels. Adding the project traffic to the existing conditions would result in changes in the traffic noise levels of no measurable change

compared to the corresponding baseline traffic noise level along most of the roadway segments analyzed, except along The Old Road between Pico Canyon Road and Calgrove Boulevard. This segment would experience a 1.3 dBA increase. The existing baseline plus project traffic noise levels along these roadway segments would have noise level changes less than the 3 dBA significance threshold increase and the project would therefore result in **less than significant** traffic noise impacts.

Table 4.12-9. Existing Baseline Roadway Noise Levels

	Traffic Noise Levels (dBA CNEL)
Roadway Segment	Existing (2021) ^a
Calgrove Boulevard e/o The Old Road	69.2
Calgrove Boulevard s/o The Old Road	74.6
Pico Canyon Road e/o The Old Road	69.7
Pico Canyon Road w/o The Old Road	70.4
The Old Road between Pico Canyon Road and Calgrove Boulevard	71.3
The Old Road n/o Pico Canyon Road	70.3

Source: Appendix J

Notes: Details provided in Appendix D to this report.

Decibel levels were calculated at a distance of 30 feet from the roadway centerline.

Table 4.12-10. Existing Roadway with Project Noise Levels

	Traffic Noise Levels (dBA CNEL)			
Roadway Segment	Existing (2021) ^a	Existing (2021) with Project	Increase over Existing	Significant Increase ^b
Calgrove Boulevard e/o The Old Road	69.2	69.6	0.4	No
Calgrove Boulevard s/o The Old Road	74.6	74.7	0.0	No
Pico Canyon Road e/o The Old Road	69.7	69.8	0.0	No
Pico Canyon Road w/o The Old Road	70.4	70.5	0.1	No
The Old Road between Pico Canyon Road and Calgrove Boulevard	71.3	72.6	1.3	No
The Old Road n/o Pico Canyon Road	70.3	70.5	0.3	No

Source: Appendix J

Notes: Details provided in Appendix D to this report.

Decibel levels were calculated at a distance of 30 feet from the roadway centerline.

- Traffic study prepared for the proposed project identified 2021 traffic volumes as existing conditions.
- b Threshold used for significant increase is 3 dBA.

Table 4.12-11, Future Roadway Noise Without and With Project Noise, lists the future baseline traffic noise levels and baseline plus project traffic noise levels. Adding the project traffic to the future conditions would result in changes in the traffic noise levels of no measurable change compared to the corresponding baseline traffic noise level along most of the roadway segments analyzed, except The Old Road between Pico Canyon Road and Calgrove Boulevard. This segment would experience a 1.6 dBA increase. The future baseline plus project traffic noise levels along these roadway segments would have noise level changes less than the 3 dBA significance threshold increase and the project would therefore result in **less than significant** traffic noise impacts under the future traffic scenario.

Traffic study prepared for the proposed project identified 2020 traffic volumes as existing conditions.

Table 4.12-12, Cumulative Roadway with Project Noise Levels, lists the cumulative baseline and cumulative baseline plus project traffic noise levels. Adding the project traffic to the cumulative conditions would result in changes in the traffic noise levels of no measurable change compared to the corresponding baseline traffic noise level along most of the roadway segments analyzed, except along The Old Road between Pico Canyon Road and Calgrove Boulevard. This segment would experience a 1.6 dBA increase. The cumulative baseline plus project traffic noise levels along these roadway segments would have noise level changes less than the 3 dBA significance threshold increase and the project would therefore not have a substantial contribution to any significant cumulative traffic impact.

Table 4.12-11. Future Roadway Without and With Project Noise Levels

	Traffic Noise Levels (dBA CNEL)			
Roadway Segment	Future (2029)ª	Future (2029) with Project	Increase over Existing	Significant Increase ^b
Calgrove Boulevard e/o The Old Road	69.2	69.6	0.4	No
Calgrove Boulevard s/o The Old Road	74.7	74.7	0.0	No
Pico Canyon Road e/o The Old Road	69.8	69.8	0.0	No
Pico Canyon Road w/o The Old Road	70.4	70.5	0.1	No
The Old Road between Pico Canyon Road and Calgrove Boulevard	71.3	72.9	1.6	No
The Old Road n/o Pico Canyon Road	70.3	70.5	0.3	No

Source: Appendix J

Notes: Details provided in Appendix D to this report.

Decibel levels were calculated at a distance of 30 feet from the roadway centerline.

Table 4.12-12. Cumulative Roadway with Project Noise Levels

	Traffic Noise Levels (dBA CNEL)			
Roadway Segment	Existing (2021)a	Future (2029) with Project	Increase over Existing	Significant Increase ^b
Calgrove Boulevard e/o The Old Road	69.2	69.6	0.4	No
Calgrove Boulevard s/o The Old Road	74.6	74.7	0.0	No
Pico Canyon Road e/o The Old Road	69.7	69.8	0.0	No
Pico Canyon Road w/o The Old Road	70.4	70.5	0.1	No
The Old Road between Pico Canyon Road and Calgrove Boulevard	71.3	72.9	1.6	No
The Old Road n/o Pico Canyon Road	70.3	70.5	0.3	No

Source: Appendix J

Notes: Details provided in Appendix D to this report.

Decibel levels were calculated at a distance of 30 feet from the roadway centerline.

Traffic study prepared for the proposed project identified 2029 traffic volumes as future conditions.

b Threshold used for significant increase is 3 dBA.

Traffic study prepared for the proposed project identified 2020 traffic volumes as existing conditions and 2029 as future conditions.

b Threshold used for significant increase is 3 dBA.

On-site Stationary Noise Source Generating Activity Levels at Off-Site Land Uses

Emergency Electricity Generators

The regular testing and maintenance of mechanical equipment such as emergency generators may generate audible noise levels. Generators may result in a noise level of 81 dBA at a distance of 50 feet. The SCMC noise regulations establish a noise standard of 65 dBA during daytime and 55 dBA during nighttime for residential uses. The closest offsite sensitive use is located 130 feet away to the east of the project site, which would experience a noise reduction of 8 dBA (by distance attenuation alone) compared to the noise level measured at 50 feet from the noise source. There would also be noise reduction provided by intervening buildings/structures between the receivers to the east and where the emergency generators would be located at the project site, which would provide additional (10 dBA or more) noise attenuation. Mechanical equipment such as emergency generators that would be fully shielded from nearby noise sensitive uses would avoid conflicts with adjacent uses and would not result in audible increases in noise levels. Noise associated with emergency generators would be reduced by 18 dBA or more to 63 dBA when compared to the noise level measured at 50 feet from the noise source. This range of noise levels is below the City's 65 dBA threshold for daytime hours. Impacts related to mechanical equipment noise would be less than significant, and no mitigation measures are required.

Parking Area Noise

Onsite surface parking would be provided at the project site. These parking areas would not be enclosed and would potentially expose off-site uses to parking related noise. Typical noise levels in a parking area with slow moving vehicles and engine start noise would range between 60 and 65 dBA at a distance of 50 feet. The closest offsite sensitive receptor is located 130 feet away to the east of the project site, which would experience a noise reduction of 8 dBA (by distance attenuation alone). There would also be potential noise reduction provided by intervening buildings/structures between the receivers and the project site, which would provide additional (5 dBA or more) noise attenuation. As such, noise associated with proposed parking lots would be reduced by 13 dBA or more to 47 to 52 dBA compared to the noise level measured at 50 feet from the noise source. This range of noise levels is lower than the City's 65 dBA threshold during daytime hours and 55 dBA during the nighttime hours, and impacts would be less than significant. No mitigation measures are required.

Heating, Ventilation, and Air-Conditioning Systems

The HVAC systems for maintaining comfortable temperatures in buildings developed under the proposed project would consist largely of packaged air conditioning systems. The precise locations of HVAC systems are unknown at this time. Possible HVAC system locations would include street level and rooftops. HVAC units can generate noise levels of approximately 51 dBA L_{eq} at a reference distance of 100 feet from the operating units during maximum heating or air conditioning operations.

The closest offsite sensitive receiver is located 130 feet away to the east of the project site, which would experience a noise reduction of 2 dBA (by distance attenuation alone) when compared to the noise level measured at 100 feet from the noise source. There would also be potential noise reduction provided by intervening buildings/structures between the receivers and the project site, which would provide additional (10 dBA or more) noise attenuation. As such, noise associated with HVAC would be reduced by 7 dBA or more to 44 dBA L_{eq} or lower, and impacts would be **less than significant**. No mitigation measures are required.

Threshold NOI-2. Would the project result in generation of excessive groundborne vibration or groundborne noise levels?

Because vibration level in RMS is best for characterizing human response to building vibration and vibration level in PPV is best used to characterize potential for damage, this construction vibration impact analysis will discuss the human annoyance using vibration levels in VdB and will assess the potential for building damages using vibration levels in PPV (inch/sec).

Site preparation for the proposed project is expected to use a bulldozer, loader, a water truck, a concrete truck, and a forklift. It is anticipated that the greatest levels of vibration would occur during the site preparation phase. All other phases are expected to result in lower vibration levels.

Vibration level (VdB) attenuation through soil is represented by the following equation:

$$LvdB(D) = LvdB(25 feet) - 30 Log(D/25)$$

Where D is the distance between the vibration source and the receiver. LvdB (25 feet) is the source vibration level measured at 25 feet. Using the above formula, it can be concluded that a vibration level at 50 feet is 9 VdB lower than the vibration level at 25 feet.

Existing vibration sensitive uses in the immediate vicinity include residential uses to the north and east of the project site, with the closest residences approximately 100 feet from the project boundary. Vibration at 100 feet from the source would be 17 VdB lower than the vibration level at 25 feet.

As shown in Table 4.12-13, Vibration Source Amplitudes for Construction Equipment, FTA guidelines show that a vibration level of up to 0.5 in/sec PPV (an equivalent of 102 VdB) (FTA 2006) is considered safe for buildings consisting of reinforced concrete, steel, or timber (no plaster), and would not result in any construction vibration damage. For a non-engineered timber and masonry building, the construction vibration damage criterion is 0.2 inch/sec PPV (equivalent to 94 VdB). The PPV values for building damage thresholds referenced in Table 4.12-4 were taken from the *Transportation and Construction Vibration Guidance Manual* (Caltrans 2013). Table 4.12-13 further shows the PPV values at 25 feet from the construction vibration source as well as vibration levels in terms of VdB at 25 feet from the construction vibration source.

Table 4.12-13. Vibration Source Amplitudes for Construction Equipment

	Reference PPV/ L _v a	Reference PPV/ L _v at 25 Feet		
Equipment	PPV (inch/sec)	L _v (VdB)		
Vibratory Roller	0.210	94		
Hoe Ram	0.089	87		
Earth Mover	0.011	69		
Excavator	0.047	81		
Fork Lift	0.047	81		
Skid Steer	0.047	81		
Wheel Loader	0.076	86		
Large Bulldozer	0.089	87		
Caisson Drilling	0.089	87		
Loaded Trucks	0.076	86		

Table 4.12-13. Vibration Source Amplitudes for Construction Equipment

	Reference PPV/ L _v at 25 Feet		
Equipment	PPV (inch/sec)	L _v (VdB)	
Jackhammer	0.035	79	
Small Bulldozer	0.003	58	

Source: Federal Transit Administration, *Transit Noise and Vibration Impact Assessment* (2006), Table 12-2. **Notes:** peak particle velocity; L_V = velocity in decibels; inch/sec = inches per second; VdB = vibration velocity decibels

Construction Vibration Structural Damages

Because vibration impacts occur normally within buildings, the distance to the nearest sensitive uses, for vibration impact analysis purposes, is measured between the nearest off-site sensitive use buildings and the project boundary (assuming the construction equipment would be used at or near the project boundary). The closest residential buildings adjacent to the project site are approximately 100 feet from the nearest construction area on the project site. Based on Table 4.12-3 and Table 4.12-4, it would take a vibration PPV level of more than 0.2 inch/sec (or 94 VdB) or 0.5 inch/sec (or 102 VdB) to potentially result in any building damage. The project site contains shallow hard bedrock that needs to be ripped by heavy bulldozers. Bulldozers and other heavy-tracked construction equipment generate approximately 0.089 in/sec PPV of groundborne vibration when measured at 25 feet, based on the Transit Noise and Vibration Impact Assessment (FTA 2006). At 100 feet, the vibration level from a large bulldozer would be reduced to 0.01 in/sec PPV. Even under the condition that the site contains shallow hard bedrock that may affect the distance attenuation of the vibration sources, the vibration level from large bulldozer would be lower than the 0.089 in/sec PPV measured at 25 feet. It would definitely be lower than the vibration damage threshold of 0.2 in/sec PPV (fragile buildings) even if no vibration attenuation is achieved through the shallow hard bedrock on the project site. Other off-site buildings are farther away from the project site and would be exposed to even lower construction vibration levels. Therefore, no building damage would occur as a result of the project-related construction vibration. Impacts would be less than significant, and no mitigation would be required to avoid building damage from construction-related vibration.

Construction Vibration Human Annoyance

Vibration reference levels from standard construction equipment expected to be used on the project site are illustrated in Table 4.12-13, above. The equation for groundborne vibration reduction (attenuation) with distance is also provided above.

Table 4.12-14 lists the projected vibration level from various construction equipment expected to be used on the project site at the sensitive receivers in the project vicinity. For the project construction activity, the most widely used equipment with the highest vibration generation potential is the large bulldozer, which would generate 87 VdB at 25 feet. With vibration attenuation through distance, the vibration from project construction would be reduced by 18 VdB at the nearest residential buildings adjacent to the project site that are at least 100 feet from the project boundary. The highest construction vibration levels at residential buildings adjacent to the project site would be 60 VdB or lower. Even under the condition that the site contains shallow hard bedrock that may affect the distance attenuation of the vibration sources, the vibration level from large bulldozer would be lower than the 87 VdB measured at 25 feet.

Table 4.12-14. Summary of Construction Equipment and Activity Vibration

	Vibration Level (VdB)			
Equipment/Activity	At 25 Feet	Distance Attenuation	Intervening Canal ^a	Maximum Vibration Level
Residences to the East (200 feet)				
Large dozers, front end loaders, grader, backhoeb	87	27	0	60
Loaded trucks	86	27	0	59
Jackhammers, forklift	79	27	0	52

Source: Appendix J

Notes: The FTA recommended building damage threshold is 0.2 inch/sec or approximately 94 VdB at the receiving property structure or building.

- a No intervening structure that would provide a damping effect on vibration.
- Large bulldozer represents the construction equipment with the highest vibration potential that would be used on site. Other equipment would result in a lower vibration when compared to that of large bulldozers.

The range of vibration levels from construction equipment or activity listed in Table 4.12-14 would be below the FTA threshold of 78 VdB (daytime hours) or 72 VdB (nighttime hours) for annoyance of occupants in residential buildings. Consequently, the potential for human annoyance from project construction-related vibration would be less than significant.

Operations

The project proposes residential uses that would not generate any substantial ground vibration. **No operational vibration impacts** would occur.

4.12.5 Mitigation Measures

The following mitigation measure would be necessary for the proposed project during construction to minimize construction noise at sensitive receptors at adjacent off-site sensitive receiver locations, and for the Senior Living building during the later phases of construction onsite after the Senior Living building has been constructed and occupied:

Construction Noise

MM-NOI-1

Construction equipment within 200 feet of the northern and eastern boundary of the project site is limited to small, reduced noise equipment that has a maximum noise generation level of $77~\mathrm{dBA}~\mathrm{L_{eq}}$ at 50 feet. This measure also applies to construction equipment during the later phases of construction for residential buildings within 200 feet of the Senior Living Building after it is occupied.

MM-NOI-2

Construction noise barriers must be installed with sufficient height to block the line-of-sight between the project construction area and adjacent sensitive receivers, including proposed on-site residential uses that are completed and occupied while construction in other parts of the project site continues, are recommended during project construction.

Operations Noise

Operation noise impacts would be less than significant. No mitigation measures would be necessary for project operational noise sources, either on-site or off-site.

Construction Vibration

Construction vibration impacts would be less than significant. No vibration mitigation measures would be necessary for the proposed project during construction.

Operations Vibration

No operational vibrational impacts would occur, and as such, no mitigation measures are required.

4.12.6 Level of Significance After Mitigation

Construction Impacts

The project's temporary construction noise levels would exceed exterior daytime noise standards at the identified sensitive receptors. As noted previously, the project would be consistent with the City's noise regulations, specifically SCMC section 11.44.080. In addition, MM-NOI-1 and MM-NOI-2 would serve to reduce construction noise levels. Nevertheless, the project's temporary construction noise levels would be considered significant and unavoidable.

Table 4.12-14 lists the maximum vibration levels that would result from the on-site construction equipment. The projected maximum construction vibration level during project construction at the nearest vibration-sensitive receiver locations would not exceed the FTA's human annoyance vibration standards of 78 VdB (daytime) for occupants of residences or the FTA's 84 VdB threshold for occupants of commercial/industrial office buildings. The project would also have construction-related vibration levels well below the building damage threshold of 0.2 in/sec PPV (for fragile structures). The project's temporary construction vibration would therefore be considered less than significant, for which no mitigation would be required.

Operational Impacts

The project's parking lots, emergency electricity generators, and HVAC systems operational noise levels would be **less than significant**, as determined at the closest residential property boundaries to the project site. As such, no mitigation measures would be required or recommended for operation noise impacts.

The project proposes residential uses that would not generate any substantial ground vibration. Operational vibration levels would be **less than significant**, as there would be no operational vibration resulting from project operation. As such, no mitigation measures would be required or recommended for operational-related vibration impacts.

4.12.7 Cumulative Impacts

This noise report was conducted for the proposed project. The results indicate that potential temporary noise impacts during construction would be considered **significant and unavoidable**. Mitigation measures NOI-1 and NOI-

2 offer to reduce construction noise when incorporated into the project construction process and include standalone construction noise barriers and limiting construction equipment within 200 feet of the northern and eastern boundary of the project site to small, reduced-noise equipment, respectively. Because construction noise is temporary and would cease to occur after completion of the project construction, exceptions to the SCMC may be requested for construction-related events, which would be considered by the City's Director of Building and Safety. Noise impacts due to operation of the proposed project (including traffic noise) would be less than significant. Vibration impacts due to construction and operation of the proposed project would be less that significant. No vibration mitigation measures are anticipated at this time.

4.12.8 References Cited

- Caltrans (California Department of Transportation). 2013. *Technical Noise Supplement A Technical Supplement to the Traffic Noise Analysis Protocol.* California Department of Transportation; Environmental Program; Environmental Engineering; Noise, Air Quality, and Hazardous Waste Management Office. October 2013. http://www.dot.ca.gov/hq/env/noise/pub/Technical%20Noise%20Supplement.pdf.
- City of Santa Clarita. 2011. *City of Santa Clarita General Plan, Noise Element*. June 2011. https://www.codepublishing.com/CA/SantaClarita/html/SantaClaritaGP/5%20-%20Noise%20Element.pdf.
- FHWA (Federal Highway Administration). 2006. *Roadway Construction Noise Model User's Guide*, U.S. Department of Transportation, Research and Innovative Technology Administration. 2006.
- FTA (Federal Transit Administration). 2006. *Transit Noise & Vibration Impact Assessment*. Federal Transit Administration, Office of Planning and Environment. May 2006.
- ESA (Environmental Science Associates) 2022. Noise and Vibration Impact Study for the Wiley Canyon (Smiser Ranch) Project City of Santa Clarita, California. October 2022

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SOURCE: Bing Imagery 2022, ESA 2020



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4.13 Population and Housing

This section describes the existing population and housing characteristics of the City of Santa Clarita (City), identifies associated regulatory requirements, and evaluates potential impacts related to implementation of the proposed Wiley Canyon Project (project). The analysis is based on a review of existing resources and applicable laws, regulations, and guidelines.

Environmental Setting 4.13.1

The project site is currently vacant land with the exception of two single-story metal buildings, two mobile homes, former mule barns, and one drained, man-made water basin associated with the former Smiser Mule Ranch which historically occupied the site. No people or housing currently occupy the project site.

Existing Estimates

The U.S. Census Bureau publishes population estimates that are updated annually. The latest population estimates to date for the City are from July 2021. The City's population as of 2021 was estimated to be 224,593 people. The U.S. Census Bureau estimates 68,406 households under existing conditions and a persons per household ratio of 3.01 (U.S. Census Bureau 2022a).

There is not a discrete source for population and housing data for the Santa Clarita Valley, however, the U.S. Census Bureau has population and housing data for the Newhall Census County Division (CCD), which has similar boundaries as the Santa Clarita Valley. As such, for the purposes of the analysis in this section, the population and housing data for the Newhall CCD is used to assess the project's impacts on the Santa Clarita Valley's existing population and housing conditions. The 2020 population within the Newhall CCD was approximately 256,872 (U.S. Census Bureau 2022b). Thus, the City's population encompasses approximately 87.4%1 of the Newhall CCD's population. The Newhall CCD contains approximately 80,651 housing units. As such, the City contains approximately 84.8% of the Newhall CCD's total housing units. Therefore, the majority of the population and households located in the Santa Clarita Valley are located within the City.

Regionally, Los Angeles County's population is estimated to be 9,829,544 people (U.S. Census Bureau 2022c). In addition, the U.S. Census Bureau estimates a total of 3,332,504 households and a persons per household ratio of 2.96 under existing conditions (U.S. Census Bureau 2022c).

Santa Clarita Valley Growth Projections

The One Valley One Vision General Plan (General Plan) (County of Los Angeles 2015) represents a joint planning effort between the City and the County of Los Angeles to guide growth and development within all portions of the Santa Clarita Valley. The Land Use Element projected that the Santa Clarita Valley would have a population between 460,000 to 485,000 residents and between 150,000 and 160,000 households over the next 20 years. For the purposes of this analysis, it is assumed that the Santa Clarita Valley is projected to have 485,000 residents and 160,000 households by approximately 2030. The General Plan also established employment projections for the same planning period. The General Plan EIR projected the Santa Clarita Valley's employment growth would range between 98,322 and 128,850 new jobs resulting in a total buildout ranging from 217,910 and 286,254 jobs. As

^{224,593 / 256,872 = 0.8473} x 100 = 87.4%

^{68.406 / 80.651 = 0.848} x 100 = 84.8%

such, for the purposes of this analysis, the Santa Clarita Valley is projected increase by 128,850 jobs, and have a buildout of approximately 286,254 total jobs by 2030.

4.13.2 Regulatory Framework

State

Housing Element Law

Government Code section 65580, et seq. requires local government plans to address the existing and projected housing needs of all economic segments of the community through Housing Elements. The Housing Element is one of seven state-mandated elements that every General Plan must contain, and it is required to be updated every eight years. The purpose of the Housing Element is to identify the community's housing needs, state the community's goals and objectives with regard to housing production, rehabilitation, and conservation to meet those needs. In addition, the Housing Element defines the related policies and programs that the community will be implemented to achieve the stated goals and objectives. This would be accomplished through the allocation of regional housing needs.

Regional

Southern California Association of Governments

The Southern California Association of Governments (SCAG) is the Metropolitan Planning Organization for six counties: Los Angeles, Orange, San Bernardino, Riverside, Ventura, and Imperial Counties. SCAG is mandated to research and develop plans for transportation, growth management, hazardous waste management, and air quality. SCAG is responsible for planning efforts that result in the Regional Transportation Plan (RTP) and the Federal Transportation Improvement Program; SCAG also develops the Sustainable Communities Strategy (SCS) to reduce greenhouse gas emissions as required by the Sustainable Communities and Climate Protection Act (Senate Bill 375).

SCAG is responsible for developing demographic projections; developing land use, housing, employment, transportation programs and strategies for South Coast Air Quality Management District; ensuring that the RTP and the Federal Transportation Improvement Program conform to the State Implementation Plans for transportation-related criteria pollutants, per the Clean Air Act; preparing the Regional Housing Needs Assessment (RHNA), including planning for future population, housing, and employment growth throughout the SCAG region; and preparing the Southern California Hazardous Waste Management Plan. SCAG is the responsible agency for developing and adopting regional housing, population, and employment growth forecasts within the project site's region. SCAG's demographic data is developed to enable the proper planning of infrastructure and facilities to adequately meet the needs of the anticipated growth.

Connect SoCal

The 2020-2045 Regional Transportation Plan/ Sustainable Communities Strategy (Connect SoCal) is a long-range transportation plan that includes goals and policies to increase mobility and enhance sustainability for the region's residents and visitors. The plan three principles to improve the region's future: mobility, economy, and sustainability. Additionally, Connect SoCal provides a regional investment framework to address the region's transportation and related challenges, while enhancing the existing transportation system and integrating land use into transportation planning (SCAG 2020).

To address the mobility challenge of the region's continuing roadway congestion, Connect SoCal proposes transportation investments in transit; passenger and high-speed rail; active transportation; transportation demand management; transportation systems management; highways; arterials; goods movement; aviation and airport ground access; and operations and maintenance projects. Connect SoCal recommends local jurisdictions accommodate future growth within existing urbanized areas, particularly near existing transit, to reduce VMT, congestion, and greenhouse gas emissions. The Connect SoCal approach to sustainably manage growth and transportation demand would reduce the distance and barriers between new housing, jobs, and services and would reduce vehicle travel and greenhouse gas emissions. As part of Connect SoCal, SCAG develops population and housing forecasts for the SCAG region and for the jurisdictions that make up the SCAG region.

Regional Housing Needs Assessment

The RHNA is mandated by State Housing Law as part of a periodic process of updating local housing elements in city and county general plans. The RHNA is produced by SCAG and contains a forecast of housing needs within each jurisdiction within the SCAG region for eight-year periods. The RHNA provides an allocation of the existing and future housing needs by jurisdiction that represents the jurisdiction's fair share allocation of the projected regional population growth. The future housing needs allocations are broken down by income level so that each jurisdiction is responsible for the development of affordable housing units to meet future housing needs.

SCAG was required to develop a RHNA methodology to distribute existing and projected housing need for each jurisdiction for the 6th Cycle, which covers the planning period between October 2021 and October 2029. On October 15, 2019, HCD provided SCAG a final regional determination of 1,341,827 units for the 6th Cycle. Following the formal distribution of draft RHNA allocations based on the Final RHNA methodology and a separate appeals phase described in Government Code section 65584.05, et seq., RHNA allocations were adopted on March 4, 2021 by the SCAG Regional Council and approved by HCD on March 22, 2021, and later modified on July 1, 2021. Based on SCAG's determination of existing need and projected needs, which considers anticipated vacancies and projected household growth, the regional existing need for additional housing units has been determined to be 836,857 units, and the regional projected need is 504,970 units (SCAG 2020). HCD's regional determination of 1,341,827 exceeds SCAG's 2020–2045 household growth forecast of 1,297,000 by 3.68% (SCAG 2020). This is due to the fact that RHNA goals were established and allocated after the adoption of the Connect SoCal.

SCAG determined the RHNA growth needs for the City of Santa Clarita. The total housing growth needs for the City during the 2021-2029 planning period is 10,031 units. The total housing growth needs is distributed by income category as shown in Table 4.13-1.

Table 4.13-1. City of Santa Clarita Population, Housing, and Employment: Census Data and Forecast

Income Group	RHNA Allocation	Percent of City's RHNA Allocation
Very Low (50% or less of median)	3,397	33.9%
Low (51% to 80% of median)	1,734	17.3%
Moderate (80% to 120% of median)	1,672	16.7%
Above Moderate (above 120% of median)	3,228	32.2%
Tot	al 10,031	100%*

Sources: SCAG 2021.

Notes: RHNA = Regional Housing Needs Assessment.

 ^{*} Totals may not sum due to rounding

Local

General Plan Housing Element

The City's Housing Element is part of the One Valley One Vision General Plan. This element sets forth the City's goals and policies with respect to housing and establishes a comprehensive 8-year program strategy for the 2021 to 2029 planning period. The Housing Element presents goals, policies, programs, and supporting information related to the provision of housing for existing and future residents of the City. The purpose of the Housing element is (1) to present specified policies an actions four housing development to meet Santa Clarita's specific, identified housing needs; and (2) to meet regional standards and achieve State certification, pursuant to statutory requirements. The following include goals and policies within the City's Housing Element that are applicable to the proposed project:

- Goal H 2: Promote the production of housing units, including affordable units, to meet the City's identified housing needs.
 - Policy H 2.3: Encourage a variety of housing types such as single-family attached (townhouses), multifamily units, planned unit developments, mixed use housing, board & care facilities and other typologies that make housing more affordable.
 - Policy H 2.5: Continue to encourage affordable "infill" projects on underutilized sites by allowing flexibility in development standards as provided in Government Code Section 65915.
 - Policy H 2.6: Promote the construction and retention of shared housing such as group homes, congregate care facilities, residential community care facilities and senior board & care facilities while ensuring the health and safety of residents and ensuring land use compatibility for neighbors.
- Goal H 4: Ensure fair access to quality housing and services for all members of the community, including those with special needs.
 - Policy H 4.7: Ensure that affected residents have the opportunity to participate in decisions that impact their health. Facilitate the involvement of residents, businesses, and organizations in all aspects of the planning process, utilizing culturally appropriate approaches to public participation and involvement.

4.13.3 Thresholds of Significance

The significance criteria used to evaluate the project impacts to population and housing are based on Appendix G of the CEQA Guidelines. According to Appendix G of the CEQA Guidelines, a significant impact related to population and housing would occur if the project would:

- 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).
- 2. Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere.

For the purposes of the impact analysis, substantial population growth is defined as population growth that exceeds adopted population growth forecasts. As detailed in Section 4.13.1, growth forecasts prepared by the One Valley One Vision General Plan and the U.S. Census Bureau were used to analyze the potential impacts of housing and population growth under the project.

4.13.4 Impact Analysis

Threshold POP-1: Would the project 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)?

As described in Chapter 3, Project Description, of this EIR, the project includes the development of 379 multifamily units, a senior living facility, commercial uses, recreation and open space, and on- and off-site infrastructure improvements. Off-site improvements would include new roundabouts, traffic signals, Class I and II bike lanes on Wiley Canyon Road and Calgrove Boulevard, and pedestrian trails. The project would connect to existing utility infrastructure located to the east of the project site along the right-of-way of Wiley Canyon Road. The proposed project would result in new residents due to the provision of new residential units on site. In addition, the proposed project would include a new senior living facility and associated commercial uses which would result in new employees on site. The potential for the project to induce unplanned population growth is discussed further in the following subsections.

Construction

During proposed construction activities, construction personnel would be required, which would generate a temporary increase in employment at the project site. However, construction employment at the project site is not anticipated to generate population growth in the City. The need for construction workers would be accommodated within the existing and future labor market in the Los Angeles metropolitan area, which is highly dense and supports a diversity of construction firms and personnel. If construction workers live outside of the City or Los Angeles County, these workers would likely commute during the relatively short and finite construction period, which is anticipated to begin in the first quarter of 2025 and conclude in the first quarter of 2027 For these reasons, construction would not induce substantial employment and/or population growth in the area, and construction impacts would be **less** than significant. No mitigation is required.

Operation

Under existing conditions, the project site is vacant and contains several existing structures proposed to be demolished. Upon project implementation, housing, population, and employment opportunities at the project site would increase relative to existing conditions.

Population Projections

Based on the data presented from the U.S. Census Bureau (see Section 4.13.1, Environmental Setting), the City of Santa Clarita has an average persons per household of 3.08 as of 2020 (U.S. Census Bureau 2022a). Therefore, the population generated by the 379-unit housing development proposed by the project would be approximately 1,167 new residents.³ Additionally, based on information provided by the project applicant, the senior living facility

^{3 379} x 3.08 = 1,167 residents

would generate approximately 204 new residents, resulting in a total residential population of 1,371. As previously mentioned, according to the U.S. Census Bureau, the City had a population of approximately 224,593 in 2020 (U.S. Census Bureau 2022a). While there is not a discrete, updated source with population data for the Santa Clarita Valley, the U.S. Census Bureau does collect population data on the Newhall CCD, which has similar boundaries as the Santa Clarita Valley. Therefore, for the purposes of this analysis, the Newhall CCD population data is used to determine the project's population impacts on the Santa Clarita Valley. According to the U.S. Census Bureau, the Newhall CCD had a population of approximately 256,872 residents in 2020. The likely increase of 1,371 new residents associated with project implementation would result in an increase of approximately 0.61%⁴ of the City's population approximately 0.53%⁵ of the Newhall CCD's population (thus, the Santa Clarita Valley's population) (U.S. Census Bureau 2022a, 2022b). Therefore, the project would result in a nominal contribution to the existing population for both the City and the Santa Clarita Valley. Furthermore, this projected population growth would represent a nominal contribution (0.28%⁶) to the projected population of 485,000 as projected for the Santa Clarita Valley in 2030. As such, the project would not result in substantial, unplanned population growth, and impacts would be **less that significant**.

Housing Projections

As mentioned above, the project is proposed on an existing, predominantly vacant site and would result in the development of residential units, a senior care facility, open space, and on- and off-site infrastructure improvements. Specifically, the project would develop 379 multifamily residential units, and a senior care facility that would accommodate approximately 120 assisted living units, 60 independent living units, and 24 memory care beds. For the purposes of this analysis, the living spaces associated with the senior care facility are not considered new housing units because they are components of the senior care facility and are not accessible to all members of the public. As discussed in Section 4.13.1, there are approximately 68,406 housing units in the City (U.S. Census Bureau 2022a). There is not a source with discrete, updated housing data for the Santa Clarita Valley. The U.S. Census Bureau, however, collects household information for the Newhall CCD, which has similar boundaries as the Santa Clarita Valley. Therefore, for the purposes of this analysis, the U.S. Census Bureau's Newhall CCD housing data is used to determine the project's housing impacts to the Santa Clarita Valley.

In 2020, the Newhall CCD has approximately 80,651 housing units (U.S. Census Bureau 2022b). The 379 new housing units generated by the project would represent approximately 0.55%⁷ of the City's total housing units and 0.47%⁸ of the Newhall CCD total housing units (U.S. Census Bureau 2022a, 2022b). This would represent a nominal increase to existing conditions within the City and the Santa Clarita Valley and would represent a minor contribution (0.24%⁹) to the 160,000 projected number of households in the Santa Clarita Valley by 2030 (City of Santa Clarita 2011).

Additionally, due to SCAG's 6th Cycle RHNA, the City is planning for the construction of 10,031 additional housing units within the planning period between 2021 and 2029. Therefore, the project would help the City achieve its regional housing needs as the project's construction schedule is anticipated to be completed by 2025, thus, housing units would be available to be occupied within the timeframe of the 6th Cycle RHNA.

^{4 1,371 / 224,593 = 0.00610} x 100 = 0.61%

^{5 1,371 / 256,872 = 0.00533} x 100 = 0.53%

^{6 1,371 / 485,000 = 0.00283} x 100 = 0.28%

⁷ 379 / 68,406 = 0.00554 x 100 = 0.55%

^{8 379 / 80,651 = 0.00469} x 100 = 0.47%

^{379 / 160.000 = 0.00239} x 100 = 0.24%

In conclusion, the project would not result in substantial unplanned housing growth, thus, impacts would be **less than significant**, and no mitigation is required.

Employment Projections

The proposed project would generate employment opportunities through both the development of commercial space and a senior care facility. Based on project-specific information provided by the applicant, the project is anticipated to generate approximately 90 employees between both the commercial space and senior living facility. The expected number of new jobs that would be generated by the proposed project would contribute 0.07% to the projected Santa Clarita Valley employment growth of 128,850 new jobs between 2010 and 2030 as established in the One Valley One Vision General Plan, meaning the number of new jobs generated by the project is well within the Santa Clarita Valley's employment growth projections.

While increases in employment opportunities at the project site fall well within employment growth projections for the City and the region, increased employment has the potential to attract additional residents to the City or surrounding areas, as new employees may relocate to the City or nearby areas upon obtaining a job at the project site. However, population growth due to employee relocation is unlikely. This is because the project is located in the densely populated Los Angeles metropolitan area, meaning it is anticipated that the jobs at the project site would be filled by City residents or by residents of neighboring cities or communities. In the unlikely event that new employees were to relocate to the City or Los Angeles County upon obtaining a job at the project site, the potential population growth would not be substantial, and impacts would be **less than significant**. No mitigation is required.

Threshold POP-2: Would the project displace substantial numbers of people or existing housing, necessitating the construction of replacement housing elsewhere?

The proposed project would not include the displacement of any people, housing, or businesses. While the site does contain existing structures, including two single-story metal buildings, two mobile homes, and former mule barns, the site is currently vacant, and these structures are not being used for housing or businesses purposes. The project would result in the development of residential units, a senior care facility, open space, and off-site improvements. Given the project site's existing conditions, the project would not result in the displacement of existing people or housing. Thus, the project would not result in the need for the construction of replacement housing outside of the project site's boundaries. **No impact** would occur.

4.13.5 Mitigation Measures

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

4.13.6 Level of Significance After Mitigation

Impacts associated with population and housing would be less than significant, and no mitigation is required.

4.13.7 Cumulative Effects

Planned projects identified in Table 3-4 of Chapter 3 of this Draft EIR could combine to create substantial population, however, as discussed under Threshold POP-1 in section 4.13.4, Impact Analysis, the proposed project would not induce substantial population growth through construction employment, nor would it result in a

substantial increase in population due to the introduction of new housing units. In addition, while the project would provide opportunities to the local and regional area for an extended period, the employment growth caused by the project falls well within the projected employment growth for the Santa Clarita Valley. Therefore, it is not anticipated that the proposed project, in combination with other future foreseeable projects, would create a cumulatively considerable impact. Impacts would be **cumulatively less than significant**.

4.13.8 References Cited

- City of Santa Clarita. 2011. City of Santa Clarita General Plan. *Land Use Element*. Published June 2011. Accessed November 9, 2022. https://www.codepublishing.com/CA/SantaClarita/html/SantaClaritaGP/2%20-%20Land%20Use%20Element.pdf
- County of Los Angeles. 2015. Los Angeles County General Plan 2035. Department of Regional Planning. Adopted October 6, 2015. Accessed May 2022. https://planning.lacounty.gov/generalplan/generalplan.
- SCAG. 2020. Final RHNA Allocation Methodology. Updated March 5, 2020. https://scag.ca.gov/sites/main/files/file-attachments/scag-final-rhna-methodology-030520.pdf?1602189316.
- SCAG. 2021. Pre-Certified Local Housing Data for the City of Santa Clarita. Accessed October 2022. https://scag.ca.gov/sites/main/files/file-attachments/santa-clarita-he-0421.pdf.
- U.S. Census Bureau. 2022a. "Newhall CCD, Los Angeles, County, CA." Accessed November 2022. https://censusreporter.org/profiles/06000US0603792110-newhall-ccd-los-angeles-county-ca/
- U.S. Census Bureau. 2022b. "QuickFacts Santa Clarita City, California." Accessed October 2022. https://www.census.gov/quickfacts/fact/table/santaclaritacitycalifornia/PST045217.
- U.S. Census Bureau. 2022c. "QuickFacts Los Angeles County, California." Accessed October 2022. https://www.census.gov/quickfacts/losangelescountycalifornia.

4.14 Public Services

This section describes the existing setting of the proposed Wiley Canyon Project (project) site, identifies associated regulatory requirements, and evaluates potential public services impacts related to implementation of the project. The analysis is based on a review of existing resources and applicable laws, regulations, and guidelines. The information presented in this section was collected from a number of publicly available sources, including the City of Santa Clarita General Plan (City of Santa Clarita 2011), the Santa Clarita Municipal Code, as well as communication with service provides.

- Los Angeles County Sheriff's Department Request for Information Letter (Villanueva 2022)
- William S. Hart Union High School District Request for Information Letter

4.14.1 Environmental Setting

Fire Protection

The City of Santa Clarita (City) contracts with the Los Angeles County Consolidated Fire Protection District (LACFD) for fire services. The LACFD currently serves 60 cities and all unincorporated areas of the County of Los Angeles. LACFD provides urban and wildland fire protection services, fire prevention services, emergency medical services, hazardous materials services, and urban search and rescue services throughout the City. The City is currently served by 15 LACFD fire stations, including Station 156, Station 132, and Station 104, which were recently built to help meet the future projected needs for fire protection services. LACFD's 2021 Developer Fee Detailed Fire Station Plan identified the need for one additional fire station in the City and four additional stations in the Santa Clarita Valley based on growth projections and proposed development (LACFD 2021). LACFD also has additional resources available to provide back-up services to the City as needed, including additional engine companies, truck companies, paramedic squads, hazardous material squads, firefighting helicopters, other fire camps, and a variety of specialty equipment.

The LACFD fire stations closest to the project site are Fire Station 124 located at 25870 Hemingway Avenue, which is approximately 1.8 miles northwest of the project site, and Fire Station 73 located at 24875 N. Railroad Avenue, which is approximately 1.8 miles northeast of the project site. Other nearby fire stations include Fire Station 126 and Station 111. Fire Station 126 is located at 26320 Citrus Street and is approximately 3.1 miles northeast of the project site. Fire Station 111 is located at 26892 Seco Canyon Road and is approximately 4.7 miles northeast of the project site.

Due to their proximity to the project site, Fire Stations 124 and 73 would be most likely to respond to incidents at the project site. Fire Station 124 is staffed 24 hours a day with a three-person engine company (one caption, one fire fighter specialist, and one fire fighter) and a two-person paramedic squad (two Fire Fighters/Paramedics). Fire Station 73 is staffed 24 hours a day with a four-person engine company (one captain, one fire fighter specialist, one fire fighter/paramedic, and one fire fighter) and a two-person paramedic squad (two fire fighter/paramedics). LACFD operates under a regional concept in its approach to providing fire protection and emergency medical services, wherein emergency response units are dispatched as needed to an incident anywhere in the LACFD's service territory based on distance and availability, without regard to jurisdictional or municipal boundaries. Therefore, while Fire Stations 124 and 73 are the two closest stations to the project site, resources from other adjacent fires stations may respond to incidents at the project site if needed.

The County's Fire Protection District Fund is a major fund used to account for LACFD fire prevention and suppression, rescue service, management of hazardous materials incidents, and acquisition and maintenance of LACFD property and equipment. Funding comes primarily from the LACFD's statutory share of the Countywide tax levy, voter-approved taxes, and charges for services. Furthermore, LACFD annually updates its Five-Year Capital Plan, which identifies anticipated facilities that would be constructed during the specific planning horizon. Funding used for land acquisitions, facility improvements, and partial funding of new equipment is generated through LACFD's Developer Fee Program, and funding used for increases in staffing is generated from local property taxes. LACFD has a developer fee in effect in in the Malibu/Santa Monica area, Santa Clarita Valley, and Antelope Valley. The LACFD developer fee for Santa Clarita Valley during the 2020-2021 fiscal year was \$1.3120 per square-foot of new floor areas of building. Application of the developer fees and property tax revenues generated by new development help to ensure adequate fire service levels for future developments.

Police Protection

Police protection within the City is provided by the Los Aneles County Sheriff's Department (LASD). There are 23 Sheriff stations dispersed throughout Los Angeles County, and the project site is located in the Santa Clarita Valley Sheriff Station's service area. The Santa Clarita Valley Sheriff Station is located at 26201 Golden Valley Road in Santa Clarita, which is located approximately 3.9 miles northeast of the project site and serves an estimated resident population of 220,495 in the City of Santa Clarita, and 67,006 in the unincorporated County areas. The Santa Clarita Valley Sheriff Station services the areas of Angeles National Forest, Bouquet Canyon, Canyon Country, Castaic City of Santa Clarita, Gorman, Hasley Canyon, Newhall, Neenach, San Canyon, Santa Clarita, Saugus, Six Flags Magic Mountain, Sleepy Valley, Southern Oaks, Stevenson Ranch, Sunset Point, Tesoro del Vale, Valencia, Val Verde, West Hills, and Westridge (LASD 2022). The Santa Clarita Valley Sheriff Station is currently staffed by 208 sworn personnel and 47 civilian employees. The Station has 24 patrol cars and eight motorcycles.

The project site is also located within the service area for the California Highway Patrol (CHP), which provides traffic enforcement and traffic collision investigative responsibilities for all State highways in the County. The CHP office is located at 28648 The Old Road in Valencia, approximately 5.3 miles northwest of the project site. The Newhall CHP Station patrols a service area of approximately 772 square miles that includes Interstate 5 (I-5), State Route 126 (SR-126), State Route 14 (SR-14), and unincorporated areas and roadways. This service area extends westerly to the Ventura County line, east to Agua Dulce, north to State Route 138 (SR-138) (and along SR-138 to Avenue 220th Street West), and south to State Route 118 (SR-118) (CHP 2024). In the Santa Clarita Valley area, the CHP maintains a Mutual Aid Agreement with the County Sheriff's Department to be able to provide better protection for the area's residences (Cal OES 2019).

School Services

The City is served by six Santa Clarita school districts. These include the Acton/Agua Dulce Unified School District, Castaic Union School District, Newall School District, Saugus Union School District, Sulphur Springs School District, and William S Hart Union High School District. The project site is located within the Newhall School District for elementary school and the William S. Hart High School District for middle and high schools. There are 10 elementary schools (grades K-6) within the Newhall School District that serve a total of 5,918 students for the 2022-2023 school year (Public School Review 2022). The William S. Hart Union High School District served 21,786 students during the 2020-2021 school year (NCES 2022) throughout seven comprehensive high schools, a continuation school, an early college high school, an independent study school, six junior high schools, an adult school, and a regional occupational program.

The nearest school to the project site is Wiley Canyon Elementary School. Wiley Canyon Elementary School is approximately 0.35 miles north of the project site at 24240 West La Glorita Circle in Newhall. According to Newhall School District Staff, Wiley Canyon Elementary School has an enrollment of 430 students in the 2022-23 school year (Ed Data 2024a). According to William S. Hart Union High School District Staff, Placerita Junior High School and Hart High School are the schools that would serve the project site. Placerita Junior High School is approximately 1.46 miles northeast of the project site at 25015 Newhall Avenue in Santa Clarita and had an enrollment of 918 students for the 2022-23 academic year. The maximum enrollment capacity is 1,500 students (Ed Data 2024b). Hart High School is located approximately 1.3 miles northeast of the project site at 24825 Newhall Avenue in Santa Clarita and had an enrollment of 2,122 students for the 2022-23 academic year with a capacity of 3,000 students (Ed Data 2024c).

Library Services

In 2011 the City assumed library services from the County of Los Angeles and established the Santa Clarita Public Library system. The City operates three public libraries within the City: Canyon Country Jo Anne Darcy Library, Old Town Newhall Library, and Valencia Library (City of Santa Clarita 2024). The Master's College and the California Institute of the Arts also provide library facilities, and the College of the Canyons has a library that is open to the public. The public library nearest to the project site is Old Town Newhall Library, which is located approximately 1.7 miles northeast of the project site.

Santa Clarita public libraries have varying operating hours six to seven days per week. Typical library hours range from 10:00 am to 8:00 pm on weekdays, with reduced hours on the weekends.

During the 2019 fiscal year, the Santa Clarita Public Library received 709,629 library patron visits, circulated 1,135,497 books and materials, and issued 13,895 new library cards.

The library's planning guidelines specify 2.75 library material items per capita and 0.5 square feet per 1,000 residents. In fiscal year 2013–2014, the total collection included 384,601 items housed in 71,066 square feet, which equates to 1.84 items per capita and 0.3398 square feet per capita. The Santa Clarita Public Library is funded primarily by property taxes; rental income; and miscellaneous revenues, including revenue from fees.

Park Services

The City of Santa Clarita Department of Parks, Recreation, and Community Services maintains 34 parks totaling approximately 375 acres. These parks range in size from slightly more than 0.5 to 80 acres and include a wide range of recreational facilities. In addition, within the City's boundary, the Los Angeles County Parks and Recreation Department owns and maintains the William S. Hart Park, Cheseborough Park, and Northridge Park, which contain an additional 239.2 acres of parkland. The standard minimum parkland-to population ratio developed by the City is 3 acres per 1,000 residents, and the City's General Plan standard is 5 acres per 1,000 residents. According to the City's General Plan Conservation and Open Space Element, based on current park facilities within the City, there are approximately 1.5 to 2 acres of parkland per 1,000 residents, which is below both the City's minimum standard and the General Plan Standard.

4.14.2 Regulatory Framework

Federal

There are no federal regulations related to public services.

State

Assembly Bill 2926

The State of California has traditionally been responsible for funding local public schools. To assist in providing facilities to serve students generated by new development projects, the state passed Assembly Bill 2926 in 1986. This bill allowed school districts to collect impact fees from developers of new residential and commercial/industrial building space. Development impact fees were also referenced in the 1987 Leroy Greene Lease-Purchase Act, which required school districts to contribute a matching share of project costs for construction, modernization, or reconstruction.

Senate Bill 50

Senate Bill (SB) 50 and Proposition 1A (both of which passed in 1998) provided comprehensive school facilities financing and reform by, among other methods, authorizing a \$9.2 billion school facilities bond issue; authorizing school construction cost containment provisions; and providing an 8-year suspension of the Mira, Hart, and Murrieta court cases. Specifically, the bond funds are to provide \$2.9 billion for new construction and \$2.1 billion for reconstruction/modernization needs. The provisions of SB 50 prohibit local agencies from denying either legislative or adjudicative land use approvals on the basis that school facilities are inadequate, and reinstate the school facility fee cap for legislative actions (e.g., General Plan amendments, Specific Plan adoption, zoning code amendments), as was allowed under the Mira, Hart, and Murrieta court cases. According to California Government Code Section 65996, the development fees authorized by SB 50 are deemed to be "full and complete school facilities mitigation." These provisions remain in place as long as subsequent state bonds are approved and available.

SB 50 establishes three levels of developer fees that may be imposed upon new development by the governing board of a school district depending on certain conditions within a district. These three levels are described below:

- 1. Level 1 fees are the base statutory fees. These amounts are the maximum that can be legally imposed upon new development projects by a school district unless the district qualifies for a higher level of funding.
- 2. Level 2 fees allow the school district to impose developer fees above the statutory levels, up to 50 percent of certain costs under designated circumstances. The state would match the 50 percent funding if funds are available. Under Level 2, the governing board of a school district may require a developer to finance up to 50 percent of new school construction costs. However, to qualify for Level 2 funding, the district must satisfy at least one of the following four requirements until January 1, 2000, or satisfy at least two of the four requirements after January 1, 2000:
 - a. Impose a Multi-Track Year Round Education (MTYRE) with:
 - i. At least 30% of K-6 enrollment in the high school attendance area on MTYRE for unified and elementary school districts; or
 - ii. At least 30% of high school district enrollment on MTYRE; or
 - iii. At least 40% of K-12 enrollment on MTYRE within boundaries of the high school attendance area for which the district is applying for funding.

- Place a local bond measure on the ballot in the last four years which received at least 50 percent plus 1 of the votes.
- c. District has issued debt or incurred obligations for capital outlay equal to a specified (under California Government Code §65995.5(b)(3)(C)) percentage of its local bonding capacity.
- d. At least 20% of teaching stations within the district are portable classrooms
- 3. Level 3 fees apply if the state runs out of bond funds after 2006, allowing the school district to impose 100 percent of the cost of the school facility or mitigation minus any local dedicated school moneys.

To accommodate students from new development projects, school districts may alternatively finance new schools through special school construction funding resolutions (e.g., the School Facilities Funding Mitigation Agreement) and/or agreements between developers, the affected school districts, and, occasionally, other local governmental agencies. These special resolutions and agreements often allow school districts to realize school mitigation funds in excess of the developer fees allowed under SB 50.

Assembly Bill 1191 "Quimby Act"

Government Code Section 66477, referred to as the Quimby Act, permits local jurisdictions to require the dedication of land and/or the payment of in-lieu fees solely for park and recreation purposes. The required dedication and/or fees are based upon the residential density, parkland cost, and other factors. Land dedication and fees collected pursuant to the Quimby Act may be used for acquisition, improvement, and expansion of park, playground, and recreational facilities or the development of public-school grounds.

California Fire Code

The California Fire Code applies to all occupancies throughout the State of California, as annotated. The California Fire Code is the minimum state standard for fire code implementation in California and is based on the content of the California Fire Code. The California Fire Code (Title 24 Cal. Code of Regs. Part 9) establishes fire-flow requirements. The minimum fire-flow requirements for one- and two-family dwellings having a fire-flow calculation area that does not exceed 3,600 square feet is 1,000 gallons per minute. The California Fire Code provides for a reduction in required flow of up to 50% when the building is provided with an approved automatic sprinkler system.

The California Fire Code contains regulations relating to construction, maintenance, and use of buildings. Topics addressed in the code include fire department access, fire hydrants, automatic storage and use, provisions intended to protect and assist fire responders, industrial processes, and many other general and specialized fire-safety requirements for new and existing buildings and the surrounding premises. The California Fire Code contains specialized technical regulations related to fire and life safety.

Health and Safety Code

State fire regulations are also set forth in Health and Safety Code Section 13000 et seq., including regulations for building standards (also set forth 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.

California Occupational Safety and Health Administration

In accordance with California Code of Regulations, Title 8, Sections 1270, Fire Prevention, and 6773, Fire Protection and Fire Equipment, the California Occupational Safety and Health Administration has established minimum standards for fire suppression and emergency medical services. The standards include guidelines on the handling of highly combustible materials; fire hose size requirements; restrictions on the use of compressed air; requirements for access roads; and guidelines for testing, maintaining, and using all firefighting and emergency medical equipment.

Mutual Aid Agreements

The California Disaster and Civil Defense Master Mutual Air Agreement, as provided by the California Emergency Services Act, provides statewide mutual aid between and among local jurisdictions and the state. The statewide mutual aid system exists to ensure that adequate resources, facilities, and other supports are provided to jurisdictions whenever resources prove to be inadequate for a given situation. Each jurisdiction controls its own personnel and facilities but can give and receive help whenever needed.

California Public Park Preservation Act

The primary instrument for protecting and preserving parkland is California's Public Park Preservation Act of 1971, Public Resources Code Sections 5400 through 5409. Under the Public Park Preservation Act, cities and counties may not acquire any real property that is in use as a public park for any non-park use unless compensation, land, or both are provided to replace the parkland acquired.

The Public Park Preservation Act only applies when a public agency acquires real property that is in use as a public park and the public agency uses the property for non-park purposes. In this case, the project applicant already owns the project site, and the site would not be acquired by a public agency. Therefore, the Public Park Preservation Act does not apply.

Local

Los Angeles County Fire Code

The Los Angeles County Fire Code (Fire Code) (Title 32), as adopted by the SCMC, establishes standards for building construction and the design and distribution of fire prevention and suppression facilities. The requirements address a variety of issues related to fire protection and prevention, such as fire flow, public and private fire hydrants, the provision of roadway clearance (Fire Code, Title 32, Section 325.10), access roads (Fire Code, Title 32, Section 503.2), adequate road widths, and clearance of brush around structures located on or adjoining any mountainous or forest- or brush-covered land, or land covered with flammable growth (Fire Code, Title 32, Section 325.2.1).

The Project site is located within a VHFHSZ, as mapped by CAL FIRE and the County (CAL FIRE 2022). To comply with the Fire Code, new development within FHSZs, must show proof through certification with the LACFD that new development is located within a designated distance of a water source, such as water supply tanks or retention basins, for emergency firefighting purposes. The Project Applicant is also required to prepare a Fuel Modification Plan (Fire Code Title 32, Section 4908). The Fuel Modification Plan would consist of a set of scaled plans, including a plot plan that shows fuel modification zones, a detailed landscape plan, and an irrigation plan, in accordance with the LACFD's Fuel Modification Plan Guidelines. Per Fire Code Title 32, the Fuel Modification Plan must be submitted

to LACFD's Forestry Division for review and approval before the Building Official issues building permits. Furthermore, based on Fire Code requirements, the Project also must comply with applicable regulations related to specific fire and life safety requirements during construction, and ingress/egress, which includes specifications for streets and driveways, all-weather access, access for road maintenance, maximum allowable grades, turning radii, building access, fire sprinkler systems, and fire hydrant installations. Additionally, all access devices/gates must meet requirements related to width, positioning, and type.

Los Angeles County Operational Area Emergency Response Plan

The Los Angeles County Operational Area Emergency Response Plan (OAERP) addresses the Operational Area's (i.e., the County's) coordinated response to emergency situations associated with natural, man-made, and technological incidents. The OAERP does not address normal day-to-day emergencies; the operational concepts reflected in the OAERP focus on potential large-scale disasters which can generate unique situations requiring an unusual or extraordinary emergency response. The OAERP establishes the coordinated emergency management system, which includes prevention, protection, response, recovery, and mitigation within the County, and describes the County's emergency organization, including authorities and responsibilities, as well as the mutual aid process during emergencies to ensure effective coordination of needed resources. The OAERP is not meant to be a standalone document, rather, it is intended to be used in conjunction with other agencies/jurisdictions emergency response plans, standard operating procedures (SOPs) and other pertinent documents.

Santa Clarita General Plan: Fire Services

Goal S 3: Protection of public safety infrastructure and property from fires.

- Objective S 3.1: Provide adequate fire protection infrastructure to maintain acceptable service levels as established by the Los Angeles County Fire Department.
- Policy S 3.1.2: Program adequate funding for capital fire protection costs, and explore all feasible funding options to meet facility needs.
- Policy S 3.1.3: Require adequate fire flow and adequate fire protection as a condition of approval for all new development.
 - Objective S 3.2: Provide for the specialized needs of fire protection services in both urban and wildland interface areas.
- Policy S 3.2.2: Enforce standards for maintaining defensible space around structures, roadside fuel reductions, and consider establishing community fire breaks through clearing of dry brush and vegetation.
- Policy S 3.2.3: Establish landscape guidelines for fire-prone areas with recommended plant materials and provide this information to builders and members of the public.
- Policy S 3.2.4: Require sprinkler systems, fire resistant roofs and building materials, and other construction measures deemed necessary to prevent loss of life and property from wildland fires.
- Policy S 3.2.5: Ensure adequate secondary and emergency access for fire apparatus, which includes minimum requirements for road width, surface material, grade, and staging areas.

- Objective S 3.3: Maintain acceptable emergency response times throughout the planning area.
- Policy S 3.3.1: Plan for fire response times of no more than five minutes in urban areas, eight minutes in suburban areas, and 12 minutes in rural areas.
- Policy S 3.3.2: Require the installation and maintenance of street name signs on all new development and the posting of address numbers on all homes and businesses that are clearly visible from adjacent streets
- Policy S 3.3.3: Identify evacuation routes and their capacity, safety, and viability under a range of emergency scenarios, and plan for the evacuation needs of developments with only one point of access.

Police Services

- Goal S 5: Protection of public safety through the provision of law enforcement services and crime prevention strategies.
 - Objective S 5.1: Cooperate with the Los Angeles County Sheriff's Department's plans for expansion of facility space to meet current and future law enforcement needs in the Santa Clarita Valley.
 - Objective S 5.2: Cooperate with the Sheriff's Department on crime prevention programs to serve residents and businesses.

Schools and Library Services

- Goal LU 8: Equitable distribution of park, recreational, and trail facilities to serve all areas and demographic needs of existing and future residents.
 - Objective LU 8.1: Work with service providers to plan for adequate community facilities and services to meet the needs of present and future residents.

Parks

- Goal CO 9: Equitable and convenient access to social, cultural, educational, civic, medical, and recreational facilities and opportunities for all residents.
 - Policy CO 9.1.1: Common park standards shall be developed and applied throughout the Santa Clarita Valley, consistent with community character objectives, with a goal of five acres of parkland per 1,000 population.
 - Policy CO 9.1.2: A range of parkland types, sizes, and uses shall be provided to accommodate recreational and leisure activities.
 - Policy CO 9.1.3: Provide local and community parks within a reasonable distance of residential neighborhoods.

4.14.3 Thresholds of Significance

The significance criteria used to evaluate the project impacts to public services are based on Appendix G of the CEQA Guidelines. According to Appendix G of the CEQA Guidelines, a significant impact related to public services would occur if the project would:

- 1. Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:
 - a. Fire protection.
 - b. Police protection.
 - c. Schools.
 - d. Parks.
 - e. Other public facilities.

4.14.4 Impacts Analysis

Threshold PUB-1: Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services:

a. Fire protection?

LACFD Fire Station 124 is the primary fire protection service provider to the project site. Fire Station 124 is located at 25870 Hemingway Avenue, which is approximately 1.8 miles northwest of the project site. Fire Station 73, located at 24875 Railroad Avenue, which is approximately 1.8 miles northeast of the project site, would provide back-up services.

Construction

Construction activities associated with the project may temporarily increase demand for fire protection and emergency medical services. Construction activities may involve the operation of construction equipment and machinery, storage, handling, and disposal of combustible materials, and the use of flammable and toxic materials. The project, however, would be constructed in accordance with all applicable construction standards including those established by the California Fire Code, Health and Safety Code, California Occupational Safety and Health Administration and the Los Angeles County Fire Code (as adopted by the SCMC). This would require that construction managers and personnel be trained in fire prevention and emergency response, as well as require that fire suppression equipment specific to construction activities be maintained on site. The project would also comply with all state and local codes and ordinances related to the maintenance of mechanical equipment, handling and storage of flammable materials, and cleanup of spills of flammable materials. Compliance with the applicable regulatory requirements would reduce the risk of hazards occurring that would require fire and emergency medical services. Additionally, the project

site is in close proximity to existing LACFD fire stations that would service the project in the event that fire protection or emergency medical services are needed during project construction.

The project proposes a number of off-site road improvements along Wiley Canyon Road as well as its intersecting streets including Fourl Road, Canerwell Street, Valley Oak Court, and Calgrove Boulevard. These improvements may require temporary road or lane closures during construction. These closures would be short-term, however, and would not significantly impact the ability for the project site or surrounding areas to receive fire protection and emergency medical services. Due to compliance with applicable codes and safety standards, as well as the limited impacts the construction of the project on the area's ability to receive fire and emergency medical services, the project's construction would not require new or expanded fire protection facilities. Therefore, impacts are **less than significant**, and no mitigation is required.

Operation

Operational activities associated with the project would increase the demand for fire protection and emergency medical services. The project includes 379 multifamily units, a senior living facility that would accommodate 204 residents, as well as commercial and recreational space. In total, the project would also result in the creation of 90 jobs (refer to Section 4.13, Population and Housing, for further discussion on general impacts associated with the project's future population and employees). In suburban areas such as the project site, the LACFD response standard is eight minutes for the first arriving unit and emergency medical services and 12 minutes for paramedic units. In correspondence with the LACFD, the department indicated that Fire Station 124, the nearest to the project site, would have an average response time of 8 minutes. To offset the costs of the additional resources needed to serve the growing city and the project itself, the applicant would be required to pay development fees established by LACFD.

The proposed project would also be designed and constructed in accordance with all applicable provisions of the applicable fire code, which includes requirements for adequate fire flows, width of emergency access routes, fire flows, width of emergency access routes, turning radii, automatic sprinkler systems, fire alarms and floor-to-sky height limits along emergency access routes.

The project is located in a suburban area that is already serviced by LACFD. While the proposed project may result in an increase in fire protection and emergency medical services, the project would not require LACFD to increase its service area in order to service the project site. Additionally, LACFD participates in mutual aid agreements, meaning that if an emergency were to occur on the project site that would require resources beyond what the fire stations in closer proximity to the site would be able to supply, other resources would be supplied from other jurisdictions. This would ensure that acceptable service ratios for fire protection and medical emergency services are maintained under project conditions.

For the reasons described above, the project would not require the construction of new, or expansion of existing, fire stations, thereby resulting in substantial adverse physical impacts in order to maintain acceptable service ratios and response times. As such, impacts would be **less than significant**, and no mitigation is required.

b. Police protection?

The project site is located in the Santa Clarita Valley Sheriff Station service area. This station is located at 26201 Golden Valley Road in Santa Clarita, which is approximately 3.9 miles northeast of the project site.

Construction

During construction, there is the potential for construction activities to create an increase in demand for police protection services, as construction sites can be sources of attractive nuisances, can provide hazards, and can invite theft and vandalism when not properly secured. During construction, the project applicant, or its construction contractor, would implement temporary security features including security fencing, lighting, and locked entry in order to secure the project site. These features would reduce the need for police protection services during the project's construction phase. Potential short-term construction impacts to police services would not result in substantial adverse physical impacts associated with the provision of new or physically altered police protection facilities, and impacts would be **less than significant**. No mitigation is required.

Operation

Operational activities associated with the proposed project would increase the demand for police protection services since the project site is currently undeveloped. As indicated by LASD, the project is located within the Santa Clarita Valley Sheriff Station's service area. LASD has indicated that the department generally adheres to the following response standards: 10 minutes for emergent calls, 20 minutes for priority calls, and 60 minutes for routine calls for service. LASD does not currently have a standard law enforcement service ratio because staffing needs vary from station to station. According to LASD however, the station's 2020-2021 average or anticipated response times were 6.25 minutes for emergent calls, 14.5 minutes for priority calls, and 71.8 minutes for routine calls. Emergent and priority calls are within the LASD response standard, while routine calls are slightly over the LASD response standard.

According to LASD, the project would not necessitate the construction of new police protection facilities. The project would, however, introduce new employees and residents within the station's service area, which would increase demand for law enforcement services. Pursuant to SCMC section 17.51.01B, the project's developer would be required to pay a law enforcement facilities fee, which would allow the station to acquire additional law enforcement service personnel and equipment to ensure that LASD is able to maintain an adequate level of service to the area. The project would also generate tax revenues from the property taxes, a portion of which would be allocated to maintain adequate sheriff station staffing and equipment levels. Furthermore, the project would comply with state and local regulations by providing adequate lighting for recreational amenities and improved open space areas as well as along pedestrian pathways, circulation ways, paths of egress, and within parking lots. These design elements would increase safety and decrease the likelihood of crime occurring.

For the reasons described above, potential operational impacts to police services would not result in substantial adverse physical impacts associated with the provision of new or physically altered police protection facilities, and impacts would be **less than significant**. No mitigation is required.

c. Schools?

As discussed in Section 4.14.1, Environmental Setting, the public schools serving the project site are Wiley Canyon Elementary School within the Newhall School District, and Placerita Junior High School and Hart High School within the William S. Hart Union High School District.

Construction

Construction of the project would require the participation of construction employees who would be hired from a throughout the greater Southern California region. Typically, construction workers work on construction sites on an intermittent basis as their particular trades are required. Given the mobility and short durations of work at a particular construction site, and a large construction labor pool that can be drawn upon in the region, construction employees would not be expected to relocate their families or their residences within this region or from other regions as a result of their work on future development of the proposed project. Accordingly, the construction phase of the project would not result in a notable increase in the resident population or generate new students needing to attend local schools. Potential construction impacts to school services would not result in substantial adverse physical impacts associated with the provision of new or physically altered school facilities, and impacts would be **less than significant.** No mitigation is required.

Operation

The project would construct 379 multifamily residential units that could potentially house elementary, junior high and/or high school aged residents, which would increase the student population within the assigned local schools. The project site is located within the Newhall School district for elementary school and the William S. Hart Union High School District for junior high and high school. As such, the school-aged residents of the project would be assigned to Wiley Canyon Elementary School, Placerita Junior High School, and Hart High School (Staszewski 2022).

Table 4.14-1, Project Enrollment Generation, below, shows the number of students that the project would be likely to generate based on generation factors provided by both Newhall School District and William S. Hart Union High School District staff (William S. Hart Union High School District 2016).

Table 4.14-1. Project Enrollment Generation

	Newhall School District ^b	William S. Hart Union High School District ^o	
Type (Number of	Elementary School Students	Junior High School Students	High School Students
Dwelling Units)	Generation Rate x Number of Dwelling Units = Total Students		
Apartment Units (379)	0.205 x 379 = 77.695	0.136 x 379 = 51.544	0.168 x 379 = 63.672
Total Students	78	52	64

Source: William S. Hart Union High School District. Student Population Projections Report (By Residence). March 2016. Accessed February 22, 2024. https://l.cdn.edl.io/ceA4JmEtR1XRv00jOmJSEmJaXpZsol6rfq0xof10p7UR3XP6.pdf.

As shown in Table 4.14-1, the project is expected to generate approximately 78 new elementary school students within Wiley Canyon Elementary School's service area, which would increase enrollment to

approximately 487 students, assuming that enrollment remains steady at 410 students year to year. The projected increase in enrollment at Placerita Junior High School would be approximately 523 students, and the projected increase in enrollment at Hart High School would be approximately 64 students.

As shown in data provided by the Education Data Partnership, the maximum enrollment capacity at Wiley Elementary School is 600 students and since the 2018-19 school year, enrollment has been on the decline, with enrollment in the 2022-23 school year at 430 students (Ed Data 2024a). With the projected increase in enrollment from proposed project, enrollment at Wiley Elementary School would remain below the maximum capacity of 600 students. Similarly, according to Ed Data, enrollment at Placerita Junior High School has also been declining, with a total enrollment of 918 students in the 2022-23 school year. With the addition of 52 junior high school aged students by the project, enrollment would remain well below the 1,500 maximum enrollment capacity (Ed Data 2024b). For Hart High School, enrollment since the 2018-19 school year has remained relatively stable yet still well below the 3,000 maximum enrollment capacity with a total enrollment of 2,122 students in the 2022-23 school year. With the addition of approximately 64 high school aged students associated with the proposed project, enrolment would continue to remain well below the maximum enrollment capacity of 3,000 students (Ed Data 2024c). As such, the project would result in less than significant impacts related to schools.

Nonetheless, as set forth in SB 50, school districts are authorized to collect fees for mitigation of the impact on new development on enrollment. As such, the project would be required to pay fees to both affected school districts, as set forth in the development fee program outlined in the Newhall School District and the William S. Hart Union High School District School Facilities Need Analyses. These fees are imposed to finance construction or reconstruction of school facilities needed to accommodate students coming from new developments. Alternatively, developers have the option to (1) enter into mitigation agreements with a district to provide funding to Newhall School District and the William S. Hart Union High School District to offset the costs to provide capacity for the new students from the project or (2) request the formation of a community facilities district. Payment of the required school district's development impact fees would ensure that impacts to service capacities of schools would be less than significant.

For the reasons outlined above, potential operational impacts to school services would not result in substantial adverse physical impacts associated with the provision of new or physically altered school facilities, and impacts would be **less than significant**. No mitigation is required.

d. Parks?

There are a wide variety of parks located within the vicinity of the project site. The City Department of Parks, Recreation, and Community Services maintains 34 parks totaling approximately 375 acres. The parks nearest to the site include Taylor Trail Wilderness and Open Space and Old Orchard Park. Additionally, the County maintains several parklands and open space areas within the vicinity of the project site.

Construction

The project would result in a temporary increase in daily population at the project site during construction due to construction workers. However, construction activities would be temporary, drawing workers from the surrounding regional population, which would not increase population or impacts to parks. Therefore, potential construction impacts to park services would not result in substantial adverse physical impacts

associated with the provision of new or physically altered park facilities, and impacts would be **less than** significant. No mitigation is required.

Operation

Once operational and occupied, the project would introduce approximately 1,371 new residents and 90 employees, at least a portion of which are anticipated to patronize the various public parks and recreation facilities located in proximity to the project site. Included in the project are several open space and recreational features including a 50,600-square-foot passive recreational grass trail and 1.3-mile long, 16-foot-wide, pedestrian trail and maintenance road to provide on-site active recreational opportunities. A 128,659 square-foot lot on the project site would also remain undeveloped under the proposed project. Additionally, the senior living facility would include a memory care garden with a central fountain, table and bench seating, faux turf and enhanced concrete pavers. This facility would also include a pool and spa, chaise lounge seating, and outdoor dining areas as well as a barbecue area with a shade structure, counter space, and pedestrian pathways and paving. The apartment residences would include a community recreation area with a pool and spa, lounge seating, outdoor dining tables, cabana shade structures, and outdoor barbecue counter.

The standard minimum parkland-to-population ratio developed by the City is three acres per 1,000 residents, and the City's General Plan standard is five acres per 1,000 residents. According to the General Plan Conservation and Open Space Element, based on current park facilities in the City, there are approximately 1.5 to two of acres of parkland per 1,000 residents, which is below both the City's minimum standard and the General Plan standard.

While the proposed project would not improve upon the existing residents to parkland ratios, the impact of the project upon the existing ratio would be modest. In addition, as discussed above, the project itself provides a variety of recreational amenities for both residents of the senior care facility and the residential units. This would help to decrease the demand upon the existing public recreational facilities given that recreational features would be immediately available for future project residents. Furthermore, the project developer/applicant would be required to pay an in-lieu fee, which would be used for the purpose of acquiring local park land or developing new or rehabilitating existing parks.

Therefore, potential operational impacts to park services would not result in substantial adverse physical impacts associated with the provision of new or physically altered park facilities, and impacts would be **less than significant**. No mitigation is required.

e. Other public facilities?

Other public facilities provided within the City include library services. Library services are provided by the Santa Clarita Public Library System. The public library nearest to the project site is Old Town Newhall Library, located approximately 1.7 miles northeast of the project site. Other libraries in the Santa Clarita Public Library System include Canyon Country Jo Anne Darcy Library (approximately 6.5 miles northeast of the project site) and Valencia Library (approximately 3.1 miles north of the project site).

Construction

The project would result in a temporary increase in persons at the project site during construction, due to the influx of construction workers. Through buildout of the Specific Plan, construction workers would be needed to support Project implementation. Construction activities would be temporary, drawing workers from the surrounding regional population, which would not increase population or impacts to other public As a result, potential construction impacts to library services would not result in substantial adverse physical impacts associated with the provision of new or physically altered library facilities, and impacts would be **less than significant**. No mitigation is required.

Operation

Once operational and occupied, the project would introduce approximately 1,371 new residents and 90 employees, at least a portion of which are anticipated to patronize the Old Town Newhall Library. The City's library planning guidelines specify that the service ratio goals are 2.75 library materials per capita and 0.5 square feet of library facilities per 1,000 residents. The increase in residents on the project site would increase demands for library services provided at the Old Town Newhall Library. Based on these guidelines, the project's projected population increase of 1,371 residents would increase the demand for library materials and space. The project developer/applicant would be required to pay a developer fee in order to ensure the Santa Clarita Public Library System is able to continue to provide adequate service levels under project conditions. Additionally, the project would generate tax revenues for the City, thereby contributing to potential funding source for library services. Therefore, potential operational impacts to library services would not result in substantial adverse physical impacts associated with the provision of new or physically altered library facilities, and impacts would be less than significant. No mitigation is required.

4.14.5 Mitigation Measures

All impacts to public services are less than significant; as such no mitigation measures are required.

4.14.6 Level of Significance After Mitigation

The proposed project would not result in significant impacts; thus, no mitigation is required.

4.14.7 Cumulative Effects

The project would result in the construction of new residential apartment units, a senior care facility, commercial space, and recreation and open space. This would increase the number of housing units, residents, and employees in the City, which, as described in Section 4.14, Population and Housing, would not lead to substantial unplanned growth. The project would lead to an increase in the demand for public services, including police and fire protection services, schools, libraries, and parks and recreation facilities. The project would also include the development of onand off-site recreational improvements including 1.3 miles of pedestrian trails as well as active and passive recreational space. The project's anticipated impacts on the City's public services would be minimal and are not expected to increase their demand beyond a level of adequate service.

The project applicant would be required to pay Development Impact Fees, pursuant to SCMC Section 17.51.010. These fees would be used for future public service and facility improvements to ensure that the project contributes its

fair share of the cost of facilities, personnel, and equipment determined to be necessary to adequately accommodate the new development in the City. The amount of fees to be paid is determined through evaluation of the need for new public service facilities as it relates to the level of service demanded by new development, which varies by specific land uses.

As shown in the analysis for the project, the project's student generation would not push school enrollment beyond their established capacities. Pursuant to Senate Bill 50, the project's developer would be required to pay school fees which would be sufficient in decrease impacts to less than significant without additional mitigation. Related projects within the City would be subject to the same schools fees as the proposed project, which would therefore, also reduce their impacts on school facilities to a less-than-significant level.

The related projects identified in Table 3-4 of Chapter 3, Project Description, would also be required to pay development impact fees to contribute their fair share to the cost of facilities, personnel, and equipment needed to adequately meet the increased service demands of new development. These related projects would also be required to pay the appropriate schools fees pursuant to Senate Bill 50. Therefore, since each related project would be required to pay the same fees as the proposed project, the amount of which would be proportionate to their increase demand on public services, impacts would not be cumulatively considerable and would be **less than significant**.

4.14.8 References Cited

- Villanueva, A. 2022. Request for Sheriff's Department Service Information, Wiley Canyon Project from Alex Villanueva of the County of Los Angeles, Office of the Sheriff. November 17, 2022.
- CAL FIRE (California Department of Forestry and Fire Protection). 2022. FHSZ Viewer. Accessed October 2022. https://egis.fire.ca.gov/FHSZ/.
- Cal OES. 2019. Law Enforcement Mutual Aid Plan. 2019 Edition. Accessed October 2022. https://www.caloes.ca.gov/wp-content/uploads/Law-Enforcement/Documents/Blue-Book_Law-Enforcement-Mutual-Aid-Plan.pdf.
- CHP 2024. (540) Newhall. https://www.chp.ca.gov/find-an-office/southern-division/offices/(540)-newhall, accessed February 23, 2024.
- City of Santa Clarita. 2011. Santa Clarita General Plan. Adopted June 14, 2011. https://www.codepublishing.com/CA/SantaClarita/html/SantaClaritaGP/SantaClaritaGP.html.
- City of Santa Clarita. 2015. *Public Library Fiscal Year 2014-2015 Annual Report*. Accessed October 2022. http://www.santaclaritalibrary.com/files/2013/08/SCPL-Annual-Report-2015.pdf.
- City of Santa Clarita 2024. City of Santa Clarita Public Library. https://www.santaclaritalibrary.com/, accessed February 23, 2024.
- Ed Data (Education Data Partnership). 2024a. Wiley Canyon Elementary. Accessed February 22, 2024. EdData School Profile Wiley Canyon Elementary (ed-data.org).
- Ed Data. 2024b. Placerita Junior High. Accessed February 22, 2024. EdData School Profile Placerita Junior High (ed-data.org).

- Ed Data. 2024c. William S. Hart High. Accessed February 22, 2024. EdData School Profile William S. Hart High (ed-data.org).
- Los Angeles County Sheriff's Department (LASD). 2022. "Los Angeles County Sheriff's Department Website: Santa Clarita Valley Sheriff's Station." Accessed October 2022. https://lasd.org/santa-clarita-valley/.
- NCES (National Center for Education Statistics). 2022. "District Directory Information: William S. Hart Union High." Accessed October 2022. https://nces.ed.gov/ccd/districtsearch/district_detail.asp?

 Search=2&ID2=0642510&DistrictID=0642510&details=1,%20accessed%20December%203,%202021
- Public School Review. 2022. "Newhall School District". Accessed October 2022. https://www.publicschoolreview.com/california/newhall-school-district/627180-school-district.
- Staszewski, S. Request for Newhall School District Information, Wiley Canyon Project from Sheri Staszewski of Newhall School District, November 18, 2022.
- William S. Hart Union High School District 2016. Student Population Projections Report (By Residence). Accessed February 22, 2024. https://l.cdn.edl.io/ceA4JmEtR1XRv00j0mJSEmJaXpZsol6rfq0xof10p7UR3XP6.pdf.

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4.15 Recreation

This section describes the existing recreation setting of the City of Santa Clarita (City), identifies associated regulatory requirements, evaluates potential impacts, and identifies mitigation measures related to implementation of the proposed Wiley Canyon Project (project). The analysis is based on a review of existing resources and applicable laws, regulations, and guidelines.

4.15.1 Environmental Setting

The project site, which is 31.8 acres, is located in the Newhall area of the City. Specifically, the project site is bordered by Interstate 5 (I-5) to the west, Wiley Canyon Road to the east, Hawkbryn Avenue to the north, and Calgrove Boulevard to the south. The project site is currently vacant with the exception of two single-story metal buildings, two mobile homes, former mule barns, and one drained, man-made water basin associated with the former Smiser Mule Ranch which historically occupied the site. The project site is currently designated as Mixed-Use – Neighborhood according to the City's General Plan and Zoning Code (City of Santa Clarita 2018).

Local and Regional Parks

The City Department of Parks, Recreation, and Community Services currently maintains 34 parks totaling approximately 375 acres. The parks range in size from slightly more than 0.5 acres to 80 acres and include wide range recreational facilities. The standard minimum parkland-to-population ratio developed by the City is three acres per 1,000 residents, and the City's General Plan standard is five acres per 1,000 residents. According to the General Plan Conservation and Open Space Element, based on current park facilities in the City, there are approximately 1.5 to two of acres of parkland per 1,000 residents, which is below both the City's minimum standard and the General Plan standard. The City's parks are categorized as discussed in the following paragraphs.

Neighborhood Parks

According to the City's General Plan Conservation and Open Space Element, neighborhood parks generally range from five to 10 acres in size and provide active recreational uses and areas intended to serve a population of 5,000 within a half-mile radius of the park. Generally, neighborhood parks are located within the residential areas that are served by the park. The City has 12 neighborhood parks, the closest of which is Old Orchard Park, which is located approximately 0.85-mile northeast of the project site. Old Orchard Park includes picnic tables, kids playground equipment, a community room, barbecue pits, public restrooms, basketball courts, and a baseball diamond (City of Santa Clarita 2022).

Community Parks

Community parks generally range from 10 to 40 acres in size and provide both passive and active recreational uses and facilities. These parks are intended to serve a population of 20,000 residents in several neighborhoods within a two-mile radius. The City has five community parks, the closest of which is Newhall Park. Newhall Park is located approximately 1.4 miles northeast of the project site and includes a child play area, picnic tables, public restrooms, a swimming pool, a basketball court, and a baseball diamond (City of Santa Clarita 2022).

Regional Parks

Regional parks are run by the Los Angeles County Parks and Recreation Department and are generally over 50 acres in size. Regional parks offer a wide range of specialized recreational activities to serve a population within a one-hour drive. The two regional parks located within the general vicinity of the City are Val Verde Park and William S. Hart Park. Additionally, one regional sports complex, Castaic Regional Sports Complex, is located in the general vicinity of the City.

Val Verde Park is approximately 58 acres in size and is located approximately 7.9 miles northwest of the project site. Val Verde Park includes a baseball diamond, basketball courts, children's play areas, a community center, public restrooms, a swimming pool and aquatic facilities, tennis courts, barbecue pits, camping sites, hiking trails, horseshoe pits, picnic tables, soccer fields, and softball fields, all of which are accessible to the public (County of Los Angeles 2022a).

William S. Hart Park is a 265-acre former ranch that was donated to Los Angeles County to be used as a park and museum. This park is located approximately 1.4 miles east of the project site and includes barbecue pits, gift shops, hiking trails, a museum, mountain biking trails, picnic tables, public restrooms, a senior center, and hiking trails, which are all accessible to the public (County of Los Angeles 2022b).

Castaic Regional Sports Complex is a 54-acre site located approximately 8.5 miles northwest of the project site. This facility includes basketball courts, baseball diamonds, a skate park, a children's play area, a gymnasium, a community center, public restrooms, barbecue pits, a computer lab, a fitness par course, football fields, horseshoe pits, multipurpose rooms, picnic rooms, running tracks, soccer fields, softball fields, volleyball courts, basketball courts, and a swimming pool and aquatic facilities (County of Los Angeles 2022c).

State Parks

The two California state parks within the City's planning area are Santa Clarita Woodlands State Park and Placerita Canyon State Park. Santa Clarita Woodlands State Park is located approximately 1.6 miles southwest of the project site, and Placerita Canyon State Park is located approximately 5 miles east of the project site.

Santa Clarita Woodlands Park is managed by the Mountains Recreation and Conservation Authority and is composed of four main recreational areas: Ed Davis Park at Townsley Canyon, East and Rice Canyons, Pico Canyon, and Mentryville. Included within the 4,000-acre park are hiking trails, oak and other vegetative woodlands, mountain biking trials, and equestrian trails (MRCA 2022).

Placerita Canyon State Park is managed by the County of Los Angeles and includes eight trails that network over 12 miles as well as a newly renovated nature center. This park also contains public restrooms, animal exhibits, equestrian trails and staging areas, a gift shop, a museum, and picnic tables (County of Los Angeles 2022d).

Federal Parks

The City's planning area encompasses a portion of the Angeles National Forest and is adjected to Los Padres National Forest (City of Santa Clarita 2011). The project site is located in the southwestern portion of the City. Los Padres National Forest is located northwest of the project site while Angeles National Forest is located east of the project site.

Open Space Areas

In addition to developed parks, the City has approximately 6,112.7 acres of undeveloped lands that are or will be preserved as open space recreational areas. Many of these areas include amenities such as hiking trails, horse trails, nature preserves, natural watercourses, golf courses, and wildlife corridors.

4.15.2 Regulatory Framework

Federal

There are no federal regulations related to the provision of recreational facilities that are applicable to the project.

State

Quimby Act

Government Code Section 66477 constitutes the Quimby Act and authorizes local jurisdictions to require the dedication of land and/or the payment of in-lieu fees solely for park and recreation purposes. The required dedication and/or fee are based on the residential density, parkland cost, and other factors. Land dedication and fees collected pursuant to the Quimby Act may be used for acquisition, improvement, and expansion of park, playground, and recreational facilities or the development of public school grounds. The Quimby Act applies only to development of residential subdivisions; therefore, the project would not be subject to the Quimby Act.

Local

City of Santa Clarita General Plan

The relevant goals, objectives, and policies from the General Plan Conservation and Open Space Element are listed below.

Park, Recreation and Trail Facilities

- Goal CO 9: Equitable distribution of park, recreational, and trail facilities to serve all areas and demographic needs of existing and future residents.
 - Objective CO 9.1: Develop new parklands throughout the Santa Clarita Valley, with priority given to locations that are not now adequately served, and encompassing a diversity of park types and functions (including passive and active areas) in consideration of the recreational needs of residents to be served by each park, based on the following guidelines:
 - Policy CO 9.1.1: Common park standards shall be developed and applied throughout the Santa Clarita Valley, consistent with community character objectives, with a goal of five acres of parkland per 1,000 population.
 - Policy CO 9.1.2: A range of parkland types, sizes, and uses shall be provided to accommodate recreational and leisure activities.

Policy CO 9.1.13: Provide local and community parks within a reasonable distance of residential neighborhoods.

Open Space

Goal CO 10: Preservation of open space to meet the community's multiple objectives for resource preservation.

Objective CO 10.2: Ensure the inclusion of adequate open space within development projects.

- Policy CO 10.2.1: Encourage provision of vegetated open space on a development project's site, which may include shallow wetlands and ponds, drought tolerant landscaping, and pedestrian hardscape that includes vegetated areas.
- Policy CO 10.2.2: Encourage that open space provided within development projects be usable and accessible, rather than configured in unusable strips and left-over remnants, and that open space areas are designed to connect to each other and to adjacent open spaces, to the extent reasonable and practical.
- Policy CO 10.2.4: Seek opportunities to incorporate site features into the open space of a project design, which may include significant trees, vegetation, terrain, or water features, to provide thermal, acoustic, and aesthetic benefits.

4.15.3 Thresholds of Significance

The significance criteria used to evaluate the projects impacts to recreation are based on Appendix G of the CEQA Guidelines. According to Appendix G of the CEQA Guidelines, a significant impact related to recreation would occur if the project would:

- 1. Increase the use of existing neighborhood and recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?
- 2. Include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment.

4.15.4 Impacts Analysis

Threshold REC-1: Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?

The project would involve the redevelopment of vacant land with a senior living facility, commercial space, 379 multifamily residential units, publicly accessible outdoor recreational field space, and off-site circulation improvements. The addition of residents and employees to a currently vacant area would likely increase the use of existing neighborhood and regional parks in the vicinity of the project site, which has the potential to accelerate the physical deterioration of these existing recreational facilities.

Construction

The project would result in a temporary increase in daily population at the project site during construction due to construction workers. However, construction activities would be temporary, drawing workers from the surrounding regional population, which would not increase population or impacts to recreational facilities such that substantial physical deterioration of the facilities would occur or be accelerated. Therefore, during construction, the project is not anticipated to result in the 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. Impacts would be less than significant. No mitigation is required.

Operation

Once operational and occupied, the project would introduce approximately 1,371 new residents and 90 employees, at least a portion of which are anticipated to patronize the various public parks and recreation facilities located in proximity to the project site. Included in the project, however, are several open space and recreational facilities including a 50,600-square-foot passive recreational grass park, and trail 1.3-mile long, 16-foot-wide pedestrian trail and maintenance road to provide on-site active recreational opportunities. Additionally, the senior living facility would include a memory care garden with a central fountain, table and bench seating, faux turf and enhanced concrete pavers. This facility would also include a pool and spa, chaise lounge seating, and outdoor dining areas as well as a barbecue area with a shade structure, counter space, and pedestrian pathways and paving. The multifamily residences would include a community recreation area with a pool and spa, lounge seating, outdoor dining tables, cabana shade structures, and outdoor barbecue counter. These recreational components of the proposed project would fulfill some of the demand for recreational facilities created by the project, which would in turn decrease the use and deterioration of existing parks and recreational facilities as a result of the project. Additionally, the project developer/applicant would be required to pay a developer fee related to parks and recreation pursuant to the Quimby Act. This would allow the City to continue to provide adequate park and recreational services.

As discussed in Section 4.13, Population and Housing, of this EIR, the project would also not result in substantial, unplanned population, employment, or housing growth. The project site and its immediate vicinity have been designated by the City's General Plan Land Use Element as a Special Development Area. The Land Use Element identifies that the project site could accommodate approximately 830,000 square feet of commercial development and 702 residential units. The proposed project falls within these estimations. As such, growth on the project site is anticipated and would not lead to unplanned growth that would lead to the substantial deterioration of existing parks and recreational facilities.

Therefore, for the reasons described above, implementation of the proposed project would not result in the 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. Impacts would be **less than significant**, and no mitigation is required.

Threshold REC-2: Would the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?

The project would develop approximately 31.8 acres of predominantly vacant and previously disturbed land with a senior living facility, a memory care facility, commercial space, 379 multifamily residential units, and off-site circulation improvements. The project would also include a number of recreational and open space features

including a 50,600-square-foot passive recreational grass park, and trail 1.3-mile long, 16-foot-wide pedestrian trail and maintenance road to provide on-site active recreational opportunities. Additionally, the senior living facility would include a memory care garden with a central fountain, table and bench seating, faux turf and enhanced concrete pavers. This facility would also include a pool and spa, chaise lounge seating, and outdoor dining areas as well as a barbecue area with a shade structure, counter space, and pedestrian pathways and paving. The multifamily residences would include a community recreation area with a pool and spa, lounge seating, outdoor dining tables, cabana shade structures, and outdoor barbecue counter. As such, the project itself includes recreational facilities, the construction and operations of which have the potential to result in physical effects to the environment, as discussed below.

Construction

Construction activities related to the proposed recreational components of the project would involve introducing heavy machinery to the project site for grading, excavation, and development. Impacts associated with project construction would be temporary and short in duration, as the project is proposed to be constructed over a period of approximately 24 months. Staging of construction equipment and construction activities would be implemented according to City regulations. Any off-site improvements or staging of equipment off site would be required to comply with applicable City regulations. As discussed throughout this EIR, impacts associated with construction of the proposed project, including the project's recreational amenities, would result in either no impact or less than significant impacts, either with or without mitigation, for all issues areas with the exception of construction noise. For construction noise, construction impacts associated with the recreational components of the project could result in **potentially significant impacts** such that mitigation would be required.

Operation

Once operational, the on-site recreational facilities would be available to the project residents as well as the general public. The recreational components that would be publicly accessible would increase the amount of recreational opportunities for residents within the City. As discussed throughout this EIR, impacts associated with operation of the proposed project, including the project's recreational amenities, would result in either no impact or less than significant impacts, either with or without mitigation, for all issue areas. As such, impacts have been determined to be **less than significant with mitigation**.

Conclusion

The project itself includes recreational facilities, the construction and operation of which have the potential to result in physical effects on the environment. As discussed above, construction and operation of the recreational components of the proposed project could result in **potentially significant** environmental impacts, such that mitigation would be required.

4.15.5 Mitigation Measures

As identified above, the recreational facilities associated with the proposed project have the potential to result in impacts related to air quality, biological resources, cultural resources, geology and soils, noise, and wildfire. With implementation of the following mitigation measures (MMs), impacts associated with recreation would be reduce. These mitigation measures are provided in full in their respective EIR sections.

- MM-AQ-1
- MM-BIO-1 through MM-BIO-4
- MM-CUL-1 through MM-CUL-5
- MM-GEO-1 through MM-GEO-4
- MM-NOI-1 through MM-NOI-2
- MM-FIRE-1 through MM-FIRE-3

4.15.6 Level of Significance After Mitigation

Threshold REC-2: Would the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?

Impacts associated with recreation would be **less than significant** with implementation of the mitigation measures identified is Section 4.15.5, above, for all environmental issue areas.

4.15.7 Cumulative Effects

As previously discussed, the proposed project would introduce new residents and employees, which would increase the demand on local parks and recreational facilities. This demand, however, would be minimal and would not require the construction of new park facilities or the physical alteration of existing facilities. The project would also include recreational and open space improvements that would fulfill a portion of the project's added demand for parks and recreational facilities. The project may also be subject to additional parkland fees, which be used for parkland improvement to allow the City to continue to provide adequate parks and recreational services under project conditions. Other related projects, including those listed in 3-4, Related Projects, of Chapter 3, Project Description, would be subject to the same parkland requirements, including the payment of fees or the construction or expansion of park facilities. As such, impacts would not be cumulatively considerable and would be **less than significant**.

4.15.8 References Cited

City of Santa Clarita. 2011. "Conservation and Open Space Element." City of Santa Clarita General Plan.

Published June 2011. Accessed November 8, 2022. https://www.codepublishing.com/CA/
SantaClarita/html/SantaClaritaGP/6%20-%20Conservation%20and%20Open%20Space%20Element.pdf.

City of Santa Clarita. 2018. *City of Santa Clarita General Plan Map*. December 2018. Accessed November 8, 2022. https://www.santa-clarita.com/city-hall/departments/administrative-services/technology-services/geographic-information-systems-gis/map-gallery.

- City of Santa Clarita. 2022. "City Parks and Facilities." City of Santa Clarita. Accessed November 8, 2022. https://www.santa-clarita.com/residents/parks-and-city-facilities.
- County of Los Angeles. 2022a. "Val Verde Community Regional Park." County of Los Angeles, Parks and Recreation. Accessed November 8, 2022. http://parks.lacounty.gov/val-verde-community-regional-park/.
- County of Los Angeles. 2022b. "William S. Hart Regional Park." County of Los Angeles, Parks and Recreation. Accessed November 8, 2022. http://parks.lacounty.gov/william-s-hart-regional-park/.
- County of Los Angeles. 2022c. "Castaic Regional Sports Complex." County of Los Angeles, Parks and Recreation. Accessed November 8, 2022. http://parks.lacounty.gov/castaic-regional-sports-complex/.
- County of Los Angeles. 2022d. "Placerita Canyon State Park." County of Los Angeles, Parks and Recreation. Accessed November 8, 2022. http://parks.lacounty.gov/placerita-canyon-state-park/.
- MRCA (Mountains Recreation and Conservation Authority). 2022. "Santa Clarita Woodlands Park." Accessed November 8, 2022. https://mrca.ca.gov/parks/park-listing/santa-clarita-woodlands-park/.

4.16 Transportation

This section describes the existing transportation setting near the proposed Wiley Canyon Project (project) site, identifies associated regulatory requirements, and evaluates potential adverse impacts related to (1) conflicts with an applicable program, plan, ordinance, or policy addressing the circulation system including transit, roadway, bicycle and pedestrian facilities; (2) conflict or inconsistency with California Environmental Quality Act (CEQA) Guidelines Section 15064.3(b); (3) a substantial increase in hazards due to a geometric design feature; and (4) inadequate emergency access. Following the impact analysis, this section lists any applicable project design features and/or mitigation measures required related to implementation of the proposed project.

The state's adoption of Senate Bill (SB) 743 and subsequent promulgation of CEQA Guidelines section 15064.3 provide that traffic delay using level of service (LOS) metric is no longer considered a significant environmental impact under CEQA. California law now requires the use of a vehicle miles traveled (VMT) metric for land use development projects, which is intended to promote the state's goals of reducing greenhouse gas emissions and traffic-related air pollution, while promoting the development of multimodal transportation system, and providing clean, efficient access to destinations. Here, this CEQA transportation impact analysis presents and uses the current VMT metric to best evaluate and disclose Project impacts in a manner consistent with current state law and policies. However, a summary of project's traffic analysis using the LOS metric is provided consistent with City requirements and for informational purposes.

The Vehicle Miles Traveled (VMT) Analysis dated February 16, 2024 and Traffic Analysis (TA), dated July 11, 2022, prepared by Stantec address the requirements established by the revised CEQA Guidelines, and the Transportation Analysis Updates in Santa Clarita (City of Santa Clarita 2020a). The reports are included as Appendix K1 and K5 of this EIR.

4.16.1 Environmental Setting

This section describes the vehicle miles traveled baseline, transit, pedestrian, and biking facilities within the vicinity of the proposed project and lists the key roadway segments and intersections included in the TA.

Vehicle Miles Traveled and Traffic Analysis Zones

CEQA Guidelines section 15064.3(a), Purpose, establishes vehicle miles traveled as the most appropriate measure of transportation impacts. The subdivision (a) defines vehicle miles traveled as "the amount and distance of automobile travel attributable to a project." The term "automobile" refers to on-road passenger vehicles, specifically cars and light trucks. The traffic analysis zone (TAZ) is the spatial unit (or geographical area) within which travel behavior, traffic generation and VMT are estimated in a travel demand model. Figure 4.16-1 depicts the project's TAZ from the Southern California Association of Governments (SCAG) travel demand forecasting model that has been used in the VMT analysis of the Project. See Section 4.16.3, Methodology, for details of project's VMT screening and analysis.

Existing Roadway System

Interstate (I)-5 runs in a north/south direction west of the project site. In the vicinity of the study area, I-5 provides four lanes in each direction. Interchanges are provided at Lyons Avenue and Calgrove Boulevard in the TA study area.

Wiley Canyon Road is oriented generally in a north-south direction in the vicinity of the project, beginning just south of the project at its intersection with Calgrove Boulevard. According to the City's General Plan, Wiley Canyon Road is considered to be a Secondary Highway in the project area (from Calgrove Boulevard to Lyons Avenue). At Lyons Avenue, Wiley Canyon Road is a four-lane roadway, and as it nears the project site it narrows to two lanes. Primary access to the project would be via Wiley Canyon Road.

Calgrove Boulevard is also classified as a Secondary Highway and travels in a generally east-west direction near the project. West of Wiley Canyon Road, Calgrove Boulevard provides access to I-5 via northbound and southbound ramps. Calgrove Boulevard ends beyond this point at its intersection with The Old Road. To the east, Calgrove Boulevard terminates after it intersects with Creekside Drive.

Lyons Avenue is classified as a Major Highway in the City of Santa Clarita. In the vicinity of the project, Lyons Avenue is a six-lane roadway that travels in an east-west direction with northbound and southbound access to I-5. Lyons Avenue continues as far east as the Newhall area and travels west until it becomes Pico Canyon Road, just west of the I-5 northbound ramps.

Access to the project would be provided by a private street connected to Wiley Canyon Road south of Wabuska Street, and emergency vehicle access is proposed via Hawkbryn Avenue.

In consultation with City Transportation staff, using the criteria of identifying locations where the project would add 50 or more peak hour trips, the following intersections were selected and included in the traffic analysis of the project:

- I-5 Southbound Ramps/ Pico Canyon Road (Signalized)
- I-5 Southbound On-Ramp/ Pico Canyon Road/Lyons Avenue (Unsignalized)
- I-5 Northbound Ramps/ Lyons Avenue (Signalized)
- Wiley Canyon Road/ Lyons Avenue (Signalized)
- Wiley Canyon Road/ La Glorita Circle/Evans Avenue (Signalized)
- Wiley Canyon Road/ Wabuska Street (Unsignalized)
- I-5 Southbound Ramps/ Calgrove Boulevard (Unsignalized)
- I-5 Northbound Ramps/ Calgrove Boulevard (Unsignalized)
- Wiley Canyon Road/ Calgrove Boulevard (Unsignalized/Future Roundabout)
- Wiley Canyon Road/ Project Driveway (Proposed Roundabout)

Figure 4.16-2 illustrates the project site location and study area selected for traffic analysis.

Public Transportation

Figure 4.16-3 illustrates transit routes, stops, and other transit infrastructure near the project. The area around the project is served by City of Santa Clarita Transit (SCT) Routes 4, 5, 6, and 14. These routes stop at the intersection of Wiley Canyon Road and Lyons Avenue, just over a half mile north of the project site. There are other transit facilities in the City of Santa Clarita that can be accessed through these routes to provide regional access to the project. These facilities include the Newhall Metrolink station and the McBean Regional Transit Center. Furthermore, SCT provides additional service trips during peak student travel times with two routes traveling along Wiley Canyon Road between Lyons Avenue and Calgrove Boulevard with stops located near Wiley Canyon Road/Evans Avenue

intersection. On school days, Route 634 provides service to West Ranch High School and Rancho Pico Junior High School, and Route 641 provides service to Hart High School and Placerita Junior High School.

Pedestrian and Bicycle Facilities

Figure 4.16-4 illustrates existing and proposed bicycle facilities near the project. Existing bicycle facilities in the vicinity of the project site include Class II on-street striped bicycle lanes on Calgrove Boulevard east of Wiley Canyon Road and on Wiley Canyon Road north of Lyons Avenue. There is also a paseo with access on Wiley Canyon Road opposite Tournament Road and on the north side of Lyons Avenue between Avenida Entrana and Avenida Rotella.

Per the Santa Clarita Non-Motorized Transportation Plan, a Class III bicycle route is proposed along Wiley Canyon Road from Lyons Avenue to Calgrove Boulevard; however, the project would provide a Class I multi-use trail from the project site south to Calgrove Boulevard, and Calgrove Boulevard will be restriped to provide Class II bike lanes. This will connect cyclists at the project site to other parts of the City with existing bicycle infrastructure. There are other proposed future bicycle facilities as well, including a Class II bicycle lane along a large segment of The Old Road that would provide access to cyclists near the project site on the west end of Calgrove Boulevard.

4.16.2 Regulatory Framework

Federal

There are no federal policies or regulations applicable to transportation with respect to the project.

State

California Department of Transportation

The California Department of Transportation, also known as Caltrans, is responsible for designing, building, operating, and maintaining California's state highway system, which consists of freeways, highways, expressways, toll roads, and the right-of-way area between the roadways and property lines. Caltrans is also responsible for permitting and regulating the use of state roadways. Caltrans' construction practices require temporary traffic control planning during any activities that interfere with the normal function of a roadway.

Caltrans Draft Transportation Impact Study Guide (TISG) and Safety Review (February 2020) replaced the Caltrans Guide for the Preparation of Traffic Impact Studies (2002). Per the 2020 TISG, Caltrans' primary review focus is VMT, replacing LOS as the metric used in CEQA transportation analyses (Caltrans 2020). Caltrans recommends use of OPR's recommended thresholds and guidance on methods of VMT assessment found in OPR's Technical Advisory (OPR 2018) for land use projects. In addition to VMT, the 2020 TISG states that it may request a targeted operational and safety analysis to address a specific geometric or operational issue related to the State Highway System and connections with the State Highway System.

Senate Bill 743

Senate Bill (SB) 743 became effective on January 1, 2014. The purpose of SB 743 is to streamline the review under the CEQA process for several categories of development projects including the development of infill projects in transit priority areas and to balance the needs of congestion management with statewide goals related to infill development, promotion of public health through active transportation, and reduction of greenhouse gas emissions. Public Resources Code section 21099(d)(1) provides that aesthetic and parking impacts of a residential, mixed-

use residential, or employment center project on an infill site within a transit priority area may not be considered significant impacts on the environment. In addition, SB 743 mandates that alternative metric(s) for determining impacts relative to transportation may be developed to replace the use of LOS in CEQA documents.

In the past, environmental review of transportation impacts focused on the delay that vehicles experience at intersections and on roadway segments, which is often measured using LOS. Mitigation for impacts on vehicular delay often involves increasing capacity such as widening a roadway or the size of an intersection, which in turn encourages more vehicular travel and greater pollutant emissions. Additionally, improvements to increase vehicular capacity can often discourage alternative forms of transportation such as biking and walking. SB 743 directed the Office of Planning and Research (OPR) to develop an alternative metric(s) for analyzing transportation impacts in CEQA documents. The alternative must promote the state's goals of reducing greenhouse gas emissions and traffic-related air pollution by promoting the development of multimodal transportation system and providing clean, efficient access to destinations. Under SB 743, it was anticipated that the focus of transportation analysis will shift from vehicle delay to VMT within transit-priority areas (i.e., areas well served by transit).

CEQA Guidelines Section 15064.3(b) is divided into four subdivisions as follows:

- (1) Land Use Projects. Vehicle miles traveled exceeding an applicable threshold of significance may indicate a significant impact. Generally, projects within one-half mile of either an existing major transit stop or a stop along an existing high-quality transit corridor should be presumed to cause a less than significant transportation impact. Projects that decrease vehicle miles traveled in the project area compared to existing conditions should be presumed to have a less than significant transportation impact.
- (2) Transportation Projects. Transportation projects that reduce, or have no impact on, vehicle miles traveled should be presumed to cause a less than significant transportation impact. For roadway capacity projects, agencies have discretion to determine the appropriate measure of transportation impact consistent with CEQA and other applicable requirements. To the extent that such impacts have already been adequately addressed at a programmatic level, such as in a regional transportation plan EIR, a lead agency may tier from that analysis as provided in Section 15152.
- (3) **Qualitative Analysis.** If existing models or methods are not available to estimate the vehicle miles traveled for the particular project being considered, a lead agency may analyze the project's vehicle miles traveled qualitatively. Such a qualitative analysis would evaluate factors such as the availability of transit, proximity to other destinations, etc. For many projects, a qualitative analysis of construction traffic may be appropriate.
- (4) Methodology. A lead agency has discretion to choose the most appropriate methodology to evaluate a project's vehicle miles traveled, including whether to express the change in absolute terms, per capita, per household or in any other measure. A lead agency may use models to estimate a project's vehicle miles traveled and may revise those estimates to reflect professional judgment based on substantial evidence. Any assumptions used to estimate vehicle miles traveled and any revisions to model outputs should be documented and explained in the environmental document prepared for the project.

Since the project is a land use development, CEQA Guidelines section 15064.3(b)(1) applies to the project. In 2020, the City updated its transportation guidelines (" City's guidelines") to reflect changes required by SB 743, collecting Baseline VMT data for the City, and then using the VMT data to consider options for the preferred VMT methodology, thresholds, and potential mitigation strategies. The City has also included Local Transportation Assessment Guidelines to inform the scope and analysis methodologies for future studies in the City. The City subsequently approved an addendum to the local guidelines and procedures for implementation of the provisions of CEQA, adopting VMT thresholds for determining significant transportation impacts effective on July 1, 2020.

Assembly Bill 1358

The Complete Streets Act of 2008 (AB 1358) requires, beginning January 1, 2011, cities and counties, upon any substantive revision to their circulation elements, to plan for a balanced multi-modal transportation network that meets the needs of all users of streets, roads, and highways, including motorists, pedestrians, bicyclists, children, persons with disabilities, seniors, movers of commercial goods, and users of public transportation.

Regional

Southern California Association of Governments

The Southern California Association of Governments (SCAG) develops the Regional Transportation Plan (RTP), which presents the transportation vision for Los Angeles, Orange, San Bernardino, Imperial, Riverside, and Ventura Counties. SB 375 was enacted to reduce greenhouse gas emissions from automobiles and light trucks through integrated transportation, land use, housing, and environmental planning. Under the law, SCAG is tasked with developing a Sustainable Communities Strategy (SCS), an element of the RTP that provides a plan for meeting emissions reduction targets set forth by the California Air Resources Board.

The 2020–2045 RTP/SCS also known as 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. It charts a path toward a more mobile, sustainable, and prosperous region by making connections between transportation networks, between planning strategies and between the people whose collaboration can improve the quality of life for Southern Californians (SCAG 2020). The Connect SoCal Plan was adopted on September 3, 2020 by SCAG's Regional Council. The goals applicable to the project are summarized below.

- Goal 1: Encourage regional economic prosperity and global competitiveness.
- Goal 2: Improve mobility, accessibility, reliability, and travel safety for people and goods.
- Goal 3: Enhance the preservation, security, and resilience of the regional transportation system.
- Goal 4: Increase person and goods movement and travel choices within the transportation system.
- Goal 6: Support healthy and equitable communities.
- Goal 7: Adapt to a changing climate and support an integrated regional development pattern and transportation network.
- Goal 8: Leverage new transportation technologies and data-driven solutions that result in more efficient travel.
- Goal 9: Encourage development of diverse housing types in areas that are supported by multiple transportation options.

This section refers to Connect SoCal 2020, however it should be noted that on November 9, 2023, SCAG published a Notice of Availability (NOA) of a Draft PEIR for Connect SoCal 2024, which serves as a programmatic document that presents a region-wide assessment of potential environmental effects of Connect SoCal 2024. This plan is not yet approved; therefore, Connect SoCal 2020 continues to be the relevant planning document.

Long Range Transportation Plan

The 2020 Long Range Transportation Plan (LRTP) provides a detailed roadmap for how the Los Angeles County Metropolitan Transportation Authority (Metro) would plan, build, operate, maintain, and partner for improved mobility in the next 30 years. The LRTP is a planning document to help guide future funding plans and policies needed to move Los Angeles County forward for a more mobile, resilient, accessible, and sustainable future. The LRTP was adopted by the Metro Board of Directors on September 24, 2020.

Metro has constructed roughly 130 miles of fixed-guideway transit in the past 40 years and the 2020 LRTP plans to add more than 100 miles over the next 30 years, the most aggressive transit expansion plan in the nation. Beyond transit, Metro will invest in arterial and freeway projects to reduce congestion, such as the I-5 North Capacity Enhancements project, and bicycle and pedestrian projects to provide alternative transportation modes, such as the LA River Path and Active Transportation Rail to Rail Corridor. Through these investments, Metro will enhance regional mobility, support economic recovery and promote sustainability through green construction practices (Los Angeles County Metropolitan Transportation Authority 2020).

Local

Santa Clarita Valley Area Plan

For reference, the County's Santa Clarita Valley Area Plan is also referred to as "One Valley, One Vision.". The Circulation Element of the OVOV is a document for the continued development of efficient, cost-effective and comprehensive transportation systems that are consistent with regional plans, local needs, and the Valley's community character. The Circulation Element complements and supports the Land Use Element, insofar as a cohesive land use pattern cannot be achieved without adequate circulation. The Circulation Element identifies and promotes a variety of techniques for improving mobility that go beyond planning for construction of new streets and highways. Following goals and objectives that are applicable to the proposed project are listed below:

- Goal C 1: Multi-Modal Circulation Network An inter-connected network of circulation facilities that integrates all travel modes, provides viable alternatives to automobile use, and conforms with regional plans.
 - Objective C 3.1: Provide multi-modal circulation systems that move people and goods efficiently while protecting environmental resources and quality of life.
 - Objective C-1.2 Coordinate land use and circulation planning to achieve greater accessibility and mobility for users of all travel modes.
 - Objective C-1.3 Ensure conformance of the Circulation Plan with regional transportation plans.
- Goal C 2: Street and Highway System A unified and well-maintained network of streets and highways which provides safe and efficient movement of people and goods between neighborhoods, districts, and regional centers, while maintaining community character.
 - Objective C-2.1 Implement the Circulation Plan for streets and highways to meet existing and future travel demands for mobility, access, connectivity, and capacity.
 - Objective C-2.2 Adopt and apply consistent standards throughout the Santa Clarita Valley for street design and service levels, which promote safety, convenience, and efficiency of travel

- Objective C-2.3 Balance the needs of congestion relief with community values for aesthetics and quality of life.
- Objective C-2.5 Consider the needs for emergency access in transportation planning.
- Objective C-2.6 Ensure that funding and phasing of new transportation improvements is coordinated with growth.
- Objective C-2.7: Pursue the safety, efficiency, and tranquility of existing and future residential streets by properly planning for local, collector and arterial roadways and limiting residential driveway access onto collector or arterial roadways
- Goal C 3: Vehicle Trip Reduction Reduction of vehicle trips and emissions through effective management of travel demand, transportation systems, and parking.
 - Objective C 3.1: Promote the use of travel demand management strategies to reduce vehicle trips.
 - Objective C 3.3: Make more efficient use of parking and maximize economic use of land, while decreasing impervious surfaces in urban areas, through parking management strategies.
- Goal C 4: Rail Service Rail service to meet regional and inter-regional needs for convenient, cost-effective travel alternatives, which are fully integrated into the Valley's circulation systems and land use patterns.
- Goal C 5: Bus Transit Establish transit impact fee rates that are based on the actual impacts of new development on the transit system, and regularly monitor and adjust these fees as needed to ensure adequate mitigation.
 - Objective C-5.1 Ensure that street patterns and design standards accommodate transit needs.
 - Objective C-5.2 Maximize the accessibility, safety, convenience, and appeal of transit stops.
 - Objective C-5.3 Explore opportunities to improve and expand bus transit service.
- Goal C-6: Bikeways A unified and well-maintained bikeway system with safe and convenient routes for commuting, recreational use, and utilitarian travel, connecting communities and the region.
 - Objective C-6.1 Adopt and implement a coordinated master plan for bikeways for the Valley, including both City and County areas, to make bicycling an attractive and feasible mode of transportation.
 - Objective C-6.2 Encourage provision of equipment and facilities to support the use of bicycles as an alternative means of travel.
- Goal C 7: Pedestrian Circulation Walkable communities, in which interconnected walkways provide a safe, comfortable and viable alternative to driving for local destinations.
 - Objective C-7.1 A continuous, integrated system of safe and attractive pedestrian walkways, paseos and trails linking residents to parks, open space, schools, services, and transit.

4.16.3 Methodology

This section summarizes the methodologies used to perform the VMT and transportation analyses. The methodologies described are consistent with City's Transportation Analysis Updates (City of Santa Clarita 2020a). In December 2018, the CEQA Guidelines were updated to include a threshold for evaluating traffic impacts using the VMT methodology. This new methodology is required to be used statewide beginning on July 1, 2020.

Vehicle Miles Traveled

The CEQA Guidelines state that "generally, vehicle miles traveled (VMT) is the most appropriate measure of transportation impacts" and define VMT as "the amount and distance of automobile travel attributable to a project." "Automobile" refers to on-road passenger vehicles, specifically cars and light trucks. OPR has clarified in the Technical Advisory and recent informational presentations that heavy-duty truck VMT is not required to be included in the estimation of a project's VMT. Other relevant considerations may include the effects of the project on transit and non-motorized traveled.

To aid in this transition, OPR released a Technical Advisory on Evaluating Transportation Impacts in CEQA. Pursuant to OPR guidelines, the City has adopted its own VMT analysis guidelines and thresholds. Therefore, the proposed project analysis uses the City's VMT analysis methodology and thresholds.

Screening for Land Use Projects

Table 4.16-1. City of Santa Clarita VMT Screening Criteria and Threshold

Category	Criteria/Screening	Threshold
Project Size	Small projects can be screened out from completing a full VMT analysis.	If the project generates less than 110 trips per day, the project is assumed to have a less than significant impact.
Locally Serving Retail	If the project is a local serving retail, the project is assumed to have a less-than-significant impact.	If local serving retail is 50,000 square feet or less, the retail project may be presumed to have a less-than-significant impact.
Low VMT Area	Residential and office projects that are located in areas with low VMT and that are similar in character to the existing development can be screened out from completing a full VMT analysis.	If the residential and office project is in an area that is already 15% below the baseline VMT, the project is assumed to have a less-than-significant impact.
Transit Proximity Projects within 0.5 miles of a major transit stop or a stop located along a high-quality transit corridor reduce VMT and therefore can be screened out from		If the project is within 0.5 miles of a major or high-quality transit stop/corridor, the project is assumed to have a less-than-significant impact.
	completing a full VMT analysis.	The project should generally also meet the following criteria:
		 FAR > 0.75 Not provide more parking than required by City Be consistent with the regional SCS Not replace existing affordable units with a smaller number of moderate- to high-income units

Table 4.16-1. City of Santa Clarita VMT Screening Criteria and Threshold

Category	Criteria/Screening	Threshold
Affordable Residential	Affordable housing in infill locations can be screened out from completing a full VMT analysis.	If a residential project is comprised 100% of affordable units and is located in an infill location, then the project is assumed to have a less-than-significant impact.
Transportation Facilities	Transportation projects that promote non-auto travel, improve safety, or improve traffic operations can be screened out from completing a full VMT analysis	If the project promotes non-auto travel, such as transit, bicycle, and pedestrian facilities; improves safety; improves traffic operations at current bottlenecks; improves intersection traffic control; or promotes widening at intersections to provide new turn lanes, then the project is assumed to have a less-than-significant impact.

Source: Appendix K1.

The proposed project meets the local serving retail and recreational uses, but does not meet any other screening criteria as explained as follows:

- The project would generate more than 110 trips per day. Therefore, the trip generation screening criteria does not apply.
- A project that proposes locally serving retail uses that are 50,000 square feet or less is eligible to be screened out. The project proposes to include a total of 8,914 square feet of locally serving retail within the mixed-use retail/residential zone to support the project residents and local community. Since the commercial component of the project would consist of locally serving retail comprised of less than 50,000 square feet, the commercial component of the project can be presumed to have a less than significant impact. Similarly, the outdoor recreational space is a locally serving use and is presumed to have a less than significant impact, since people typically go to parks that are near to their homes and generally would not drive long distances if there are parks nearby.
- The project is not in a low VMT generating area according to maps depicting low VMT areas as prepared by the City for analyses of this type; therefore, the project does not meet the criteria for a low VMT Area Screening.
- A project can be screened out as having a less than significant impact on VMT if the project is within ½ mile of a rail station or bus stop that provides service at least every 15 minutes during peak commute periods. The Santa Clarita Transit bus stop that is closest to the project is at the Lyons Avenue/Wiley Canyon Road intersection, that is just over the half-mile threshold and the headways are greater than 15 minutes. The project is being conditioned to add two bus stops c. Although the bus stops would be within the half-mile mile threshold, headways would likely be greater than 15 minutes. Therefore, the project does not meet the criteria for a transit priority area screening.
- The project is not comprised 100% of affordable housing in an infill area, so this screening threshold does not apply.

Methodology for Vehicle Miles Traveled Estimation and Efficiency Metric

The City has selected the SCAG model as the most appropriate tool for the SB 743 implementation process, since the SCAG model covers the entire SCAG region, and therefore captures a more complete assessment of trip length and VMT as compared to the City's traffic model. This ensures that VMT generated in the City that occurs outside the City limits is captured and allows for comparison between the City's VMT data and regional VMT data. The most recent version of the SCAG model has a base year of 2012 and future year of 2040 and was developed for the 2016 RTP/SCS. The VMT data is based on the TAZ in the City during the Base Year 2012, Future Year 2040 conditions, and interpolated conditions to estimate the Existing Year 2020 baseline.

For the City, the VMT methodology includes all trips within the SCAG model for each of the following variable formats:

- Total VMT per Service Population (all vehicles and all trip purposes): The total VMT to and from all zones in the City is divided by the total service population (employees and residents) in the City to get the efficiency metric of VMT per service population.
- Home-Based VMT per Capita (automobile only): Includes all VMT for home-based auto vehicle trips that are
 traced back to the residence of the trip-maker (non-home-based trips are excluded). This VMT is then
 divided by the population within the City to get the efficiency metric of Home-Based VMT per Capita.
- Home-Based Work VMT per Employee (automobile only): Includes all VMT for auto vehicle trips between home and work. This VMT is then divided by the number of employees within the City to get the efficiency metric of Home-Based Work VMT per Employee.

The City of Santa Clarita has defined their baseline VMT as the average VMT for the City. This ensures that projects are considered in relation to the current built environment, transportation network, and travel options in Santa Clarita. Table 4.16-2 provides the baseline and 15% below baseline Citywide VMT metrics for the City of Santa Clarita, using the SCAG model.

Table 4.16-2. City of Santa Clarita VMT Metrics

	Average VMT					
VMT Metrics	2012 Base Year	2020 Baseline ¹	2040 Future Year			
Total VMT per Service Population	40.8	37.5	28.6			
15% below Threshold	34.7	31.9	24.3			
Home-Based VMT per Capita	24.4	22.7	19.5			
15% below Threshold	20.7	19.3	16.6			
Home-Based Work VMT per Employee	21.0	18.4	13.5			
15% below Threshold	17.9	15.7	11.5			

Source: Transportation Analysis Updates in Santa Clarita, May 2020

Based on project's land uses, the project's VMT analysis was conducted using the metric of Home-Based VMT per Capita and Home-Based Work VMT per Employee.

City of Santa Clarita VMT Thresholds

The City has adopted the following specific VMT thresholds (City of Santa Clarita 2020b):

- a) A residential project's traffic and transportation analyses that do not result in a 15% reduction of Vehicle Miles Traveled (VMT) as compared to the Citywide baseline VMT for home-based per capita.
- b) An employment (commercial or industrial) project's and transportation analyses that do not result in a 15% reduction of VMT as compared to the Citywide baseline VMT for home-based work VMT per employee.

²⁰²⁰ Baseline and 15% below threshold values are used in the Project's VMT analysis.

- c) A regional retail project's traffic and transportation analyses that result in a net increase in total VMT in comparison to the Citywide Baseline VMT.
- d) A land use plan's traffic and transportation analyses that do not result in a 15% reduction of VMT as compared to Citywide baseline VMT for total VMT per service population.
- e) A transportation project's traffic and transportation analyses that result in an increase in VMT in the study area in comparison to baseline conditions.

The home-based VMT per resident and home-based work VMT per employee and a threshold of 15% reduction (for residential and employment-based uses) as compared to the Citywide baseline VMT have been selected for the proposed project's VMT analysis, per City's guidelines.

Project Trip Generation

The proposed project consists of approximately 379 multifamily residential units, 8,914 square feet of commercial retail development, and a 217-unit Senior living facility that includes 130 Independent Living units, 61 Assisted Living units, and 26 Memory Care units. It also includes a publicly accessible outdoor recreational space. Trip generation estimates were prepared using standardized Institute of Transportation Engineers (ITE) 11th Edition trip generation rates for the Multifamily Housing Low-Rise (220) Residential category, the Strip Retail Plaza less than 40,000 square feet (822) category, and the Continuing Care Retired Community (CCRC) (225) category. ITE manual describes CCRC as a land use category that includes various combinations of senior adult housing, congregate care, assisted living, and nursing home.

As shown in Table 4.16-3, the proposed project is expected to generate approximately 3,696 average daily trips (ADT), with 210 trips occurring during the AM peak hour and 307 trips occurring during the PM peak hour before accounting for the internal capture of trips between uses and existing trips currently passing by the project site. The internal trip capture for the project is derived using the National Cooperative Highway Research Program (NCHRP) Report 684: Enhancing Internal Trip Capture Estimation for Mixed-Use Developments. Taking into account the internal capture, the project would generate approximately 3,548 daily external trips, 208 external trips during the AM peak hour, and 293 external trips during the PM peak hour as shown in Table 4.16-3. A pass-by trip reduction was applied to the Commercial Shopping Center based on the data provided in the ITE Trip Generation Handbook, Third Edition (ITE 2021). As shown in Table 4.16-3, the project would generate approximately 3,488 net new daily trips, 205 net new AM peak hour trips, and 269 net new PM peak hour trips.

Table 4.16-3. Project Trip Generation Summary

			AM Peak Hour		PM Peak Hour			Average	
Trip Generation	Amount	Units	In	Out	Total	In	Out	Total	Daily Trips
Multi-family Apartments	379	DU	36	115	151	122	72	194	2,554
Commercial Shopping Center ¹	8.9	TSF	16	11	27	36	36	72	606
Senior Living Facilities/CCRC	217	Units	21	11	32	16	25	41	536
Total Gross Trips		73	137	210	174	133	307	3,696	
Internal Capture %		2%	1%	2%	4%	5%	5%	4%	
Reduction for Internal Capture ²		1	1	2	7	7	14	148	
Total External Trips		72	136	208	167	126	293	3,548	
Pass-by Trip Reduction									

Table 4.16-3. P	roject Trip	Generation	Summary
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			AM Peak Hour		PM Peak Hour			Average	
Trip Generation	Amount	Units	In	Out	Total	In	Out	Total	Daily Trips
Commercial Shopping Center³ (AM – 10%; PM – 34%; ADT – 10%		2	1	3	12	12	24	61	
Net New External Trips		70	135	205	155	114	269	3,488	

Source: Appendix K5 and Institute of Transportation Engineers (ITE), Trip Generation Manual 11th Edition, 2021

Notes: ADT - Average Daily Trips; TSF - Thousand Square Feet; DU - Swelling Unit

- Shopping Center rate is based on the fitted curve equation
- ² Internal capture based on NCHRP Report 684 Internal Trip Capture Estimation Tool
- Pass-By Trips Source: ITE Trip Generation Handbook, 3rd Edition, 2017 for PM, used 10% for AM & ADT

Project Trip Distribution and Assignment

The geographic distribution of project-generated trips was derived using the Santa Clarita Valley Consolidated Traffic Model (SCVCTM). The SCVCTM is a computerized travel demand model that utilizes a sophisticated trip distribution function to derive the distribution of vehicle trips, and which has previously been calibrated to the existing conditions of the Santa Clarita Valley. The SCVCTM is jointly maintained by City of Santa Clarita and County of Los Angeles staff and is utilized for all major transportation planning efforts within the Santa Clarita Valley. Production and attraction trip data is generated by the model based on five separate trip purposes, and trip distribution patterns are then derived by the model. As a final step, the model assigns these trips to the roadway network based on the derived distribution patterns. The project's trip distribution percentages as determined by a SCVCTM select zone run, indicate that approximately 69 percent of the project trips would travel north along on Wiley Canyon Road, and 31 percent of the project trips would travel south on Wiley Canyon Road. Project trips were assigned to the study area intersections and the operational analysis under Existing, Existing plus Project, Interim Cumulative Year and Interim Cumulative Year plus Project is provided in the project's TA, Appendix K5.

Access and On-Site Roadway System

Public access to the project would be provided by a private street connected to Wiley Canyon Road. The project entrance would be located at the northern end of the site and controlled by a single-lane roundabout. An emergency vehicle only access would be provided by a driveway on Hawkbyrn Avenue.

4.16.4 Thresholds of Significance

The significance criteria used to evaluate the project impacts to traffic and circulation are based on Appendix G of the CEQA Guidelines. According to Appendix G of the CEQA Guidelines, a significant impact related to traffic and circulation would occur if the project would:

- 1. Conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities.
- Conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b).
- 3. Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment).
- 4. Result in inadequate emergency access

4.16.5 Impact Analysis

Threshold TRA-1. Would the project conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities?

SCAG 2020-2045 RTP/SCS

The RTP/SCS establishes goals for the region and identifies transportation investments that address the region's growing population, as well as strategies to reduce traffic congestion and greenhouse gas (GHG) emissions (SCAG 2020). The RTP/SCS goals are listed in Section 4.16.2, Regulatory Framework. An assessment of whether the project would conflict with SCAG's 2020-2045 RTP/SCS Goals is shown in Table 4.17-4, Potential to Conflict with 2020-2045 RTP/SCS Goals, below.

Table 4.16-4. Potential to Conflict with 2020-2045 RTP/SCS Goals

RTP/SCS Goal	Project Applicable Component(s)
Goal 1 Encourage regional economic prosperity and global competitiveness.	No Conflict. The project would develop 379 residential units and 217 CCRC units. As such, the project would improve regional economic development by introducing a mix of multi-family and senior housing units in proximity to a major transportation corridor with access to major employment centers in the Santa Clarita Valley and beyond.
Goal 2 Improve mobility, accessibility, reliability, and travel safety for people and goods.	No Conflict. The location of the project site, in proximity to the Valencia Plaza and SCT Routes 4,5,6, and 14, just over half-mile north of the project and addition of two new transit stops within half-mile of the Project would improve mobility and the accessibility to the project site. Project would also construct Class I multi-use trail along Wiley Canyon, south of the project. Both the Calgrove Boulevard and Lyons Avenue freeway interchanges would provide access to the project via Wiley Canyon Road. The project would include improvements to the I-5 ramp intersections at Calgrove Boulevard to further improve traffic flow and improve accessibility to the project site.
Goal 3 Enhance the preservation, security, and resilience of the regional transportation system.	No Conflict. The project proposes to emphasize the use of alternative travel modes, such as cycling and transit, which would support the region's transportation investment and the sustainability of the regional transportation system. The project will provide less parking than required by City's code. The project will provide a Class I trail from the project site south to Calgrove Boulevard, and Calgrove Boulevard will be restriped to provide Class II bike lanes. This will connect cyclists at the project site to other parts of the City with existing bicycle infrastructure as well as proposed bicycle facilities including a Class II bicycle lane along a large segment of The Old Road.
Goal 4 Increase person and goods movement and travel choices within the transportation system.	No Conflict. The location of the project site, in proximity to the Valencia Plaza and SCT Routes 4,5,6, and 14; the I-5 and Calgrove Boulevard and Lyons Avenue; and addition of new multi-use trail and transit stops along Wiley Canyon Road, would support an increase in person movement and increase the available travel choices within the transportation system.
Goal 5	No Conflict. The project would provide traffic calming by constructing roundabout at the project driveway and on-site to regulate internal traffic. It

Table 4.16-4. Potential to Conflict with 2020-2045 RTP/SCS Goals

RTP/SCS Goal	Project Applicable Component(s)
Reduce greenhouse gas emissions and improve air quality.	will promote access from the nearby transit, provide bicycle storage areas for project residents, employees, and visitors, and provide off-site improvements along Wiley Canyon Road. The project site is oriented such that visitors and residents would be able to walk through and around the project site with multiple access points and community connections to the residential development and internal streets.
	As demonstrated in response to Threshold 4.8b of Section 4.8, Greenhouse Gas Emissions, the project complies with plans, policies, regulations and GHG reduction actions/strategies outlined in General Plan and OVOV, and 2020–2045 RTP/SCS. In addition, the Project Design Features (PDFs 1-7) described in Section 4.16.6 would reduce VMT and hence GHG emissions and improve air quality, in support of this goal.
Goal 6	No Conflict. The project would support "healthy and equitable communities"
Support healthy and equitable communities.	through street improvements and preserving open spaces in Lot 4 and 5, as well as Class I trail south of the Project site to Calgrove Boulevard, which would be easily accessible to project residents and residents of the surrounding neighborhoods.
	The project's interior roadway system has been designed consistent with City roadway design criteria.
Goal 7 Adapt to a changing climate and support an integrated regional development pattern and transportation network.	No Conflict. As described in Section 3.2, Project Characteristics of this Draft EIR, access to the project would be provided along Wiley Canyon Road, and emergency access from Hawkbryn Avenue. Off-site improvements of the project would include intersection improvements briefly described in Section 4.16.5 and provided in the TA (Appendix K5). A new concrete sidewalk would be installed along the eastern frontage of the project site along Wiley Canyon Road as part of Class I trail, which would include a 5 feet wide pedestrian path along with 11 feet wide bicycle path, which would improve transportation network around the site.
	The project would develop high density residential uses within proximity to the Valencia Plaza and SCT Routes 4,5,6, and 14 and roadways of Wiley Canyon Road, Calgrove Boulevard, and Lyons Avenue; it would add new multi-use trail and transit stops along Wiley Canyon Road and proposes to construct off-site improvements to the traffic study area intersections, thus supporting an integrated regional development pattern and transportation network.
Goal 8	No Conflict. The project site has access to regional transportation systems
Leverage new transportation technologies and data-driven solutions that result in more efficient travel.	that can use new transportation technologies and data driven solutions to provide more efficient travel. Additionally, the project's proximity to the Valencia Plaza and multiple regional and local bus lines; Wiley Canyon Road, Calgrove Boulevard, and Lyons Avenue; and bicycle facilities and transit stops along Wiley Canyon Road would maximize mobility and the accessibility to the project site.
Goal 9	No Conflict. The project would construct 379 multi-family units and CCRC
Encourage development of diverse housing types in areas	units, within an area that is supported by multiple transportation options, including public transportation routes, pedestrian facilities, and bicycle

Table 4.16-4. Potential to Conflict with 2020-2045 RTP/SCS Goals

RTP/SCS Goal	Project Applicable Component(s)
that are supported by multiple transportation options.	facilities, and off-site improvements. The residential portion includes a mix of unit types to encourage multi-family and senior housing within this area to the City. The project includes features that emphasize the use of alternative travel modes, such as cycling and transit.

Source: SCAG 2020.

As shown in Table 4.17-4, the project would be consistent with 2020-2045 RTP/SCS goals to encourage economic prosperity; improve mobility, accessibility, reliability, and travel safety; enhance the preservation, security, and resilience of the regional transportation system; increase the productivity of the transportation system, reduce GHG emissions and improvement of air quality; support healthy and equitable communities; adapt to climate change and support an integrated regional development pattern; leverage new transportation technologies and data driven solutions that result in more efficient travel; and encourage development of diverse housing types. The project is consistent with the General Plan land use designation. Therefore, the project would result in a less than significant impact with regard to potential conflicts with the 2020-2045 RTP/SCS.

City of Santa Clarita General Plan Consistency

An operational analysis of intersections identified for the project's traffic study area and site access analysis per City's Guidelines is included in Appendix K5. The operational analysis of intersections has been conducted to provide a level of service analysis for existing and cumulative year traffic conditions under with and without project conditions. The City uses the criteria of LOS D to LOS E or F, or if an intersection is already operating at LOS D to determine the degradation caused by addition of project trips. The project would construct or pay its fair-share towards improvements required to reduce operational deficiencies identified at the intersections analyzed in the TA (Appendix K5). These improvements would be included as conditions of approval for the project.

The Circulation Element of OVOV includes goals, objectives and policies pertaining to circulation within the Santa Clarita planning area, which includes the project site. As discussed in Section 4.10, Land Use and Planning, and circulation goals and objectives listed in Section 4.16.2 Regulatory Framework, the project would not conflict with OVOV goals and policies. As such, the project would not conflict with or impede implementation of any applicable policies within the OVOV and would result in a **less than significant impact**. No mitigation is required.

Transit, Bicycle, and Pedestrian Facilities

The project would not conflict with any plans or policies regarding existing or proposed transit, bicycle, and pedestrian facilities in its vicinity. The construction of the project would not impede existing or planned circulation system in the City. All required staging and parking areas related to project construction would be located on the project site. For any construction work in the public ROW of Wiley Canyon Road, the projects' contractor will obtain encroachment permits from the City's Public Works Department. If required, the contractor shall prepare and implement traffic control plans to ensure access for all road users and may include the need for flagmen and pedestrian detours.

Once operational, bicycle and pedestrian access to the project site would be facilitated with Class I trail along Wiley Canyon Road to Calgrove Boulevard and closure of gaps in sidewalks which would be constructed by the proposed project. Further, the project would not preclude implementation of the City of Santa Clarita 2020 Non-Motorized

Transportation Plan, including any future plans to complete the additional Class II and II bicycle facilities in its vicinity. The project is proposing to add two bus stops on Wiley Canyon Road: a northbound and a southbound stop to be located north of the project entrance between Wabuska Street and the project entrance. The existing bus stops and other transit facilities would not be affected by project operations. Given the various transit facilities available near the project site, there is sufficient transit capacity in the study area. Therefore, the project's impact on transit, bicycle, and pedestrian facilities would be **less than significant**. No mitigation is required.

As shown in the analysis above, the project's impacts related to SCAG's 2020-2045 RTP/SCS, the OVOV and impacts to the circulation system, including transit, roadway, bicycle, and pedestrian facilities, would be **less than significant**. No mitigation is required.

Threshold TRA-2. Would the project conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b)?

CEQA Guidelines Section 15064.3(b) focuses on VMT metric adopted pursuant to SB 743 for determining the significance of transportation impacts. For the purposes of this Draft EIR, the recommended VMT analysis methodology and thresholds identified within the City's guidelines have been used. The VMT analysis memorandum prepared by Stantec is included in Appendix K1.

Vehicle Miles Traveled Analysis

As mentioned under Section 4.16.3, the VMT of the project has been evaluated for residents of the multi-family and employees of the CCRC components of the project, respectively.

Baseline Vehicle Miles Traveled

The project is located in traffic analysis zone (TAZ) 20236200 (see Figure 4.16-1), which includes residential land uses similar in nature to the proposed project. Since the project's land uses are comparable to the land use in TAZ 20236200, the project can be expected to exhibit trip generation and trip length characteristics similar to the other residential land use in the TAZ. As such, the per capita VMT as calculated by the traffic model for TAZ 20236200 can be used to estimate the project's VMT. The residential component of the project and the CCRC employment generating component of the project are evaluated separately consistent with the City guidelines.

As shown in Table 4.16-4, the baseline home-based VMT for the TAZ is approximately 21.86 VMT per capita, and the home-based work VMT for the TAZ is approximately 17.81 VMT per employee. Because these VMT estimates reflect the TAZ average, they do not account for VMT reductions due to specific VMT reducing components, as described below. Based on the VMT guidelines for the significance threshold, a 15% reduction is applied to the citywide baseline average home-based VMT (22.72 VMT per capita), resulting in a threshold of significance of 19.3 VMT per capita for residential development. Similarly, a 15% reduction is applied to the citywide baseline average home-based work VMT (18.45 VMT per employee), resulting in a threshold of significance of 15.7 VMT per employee.

Project Components for VMT Reduction:

As described in the project's VMT analysis, the project includes several VMT reducing components. These allow for quantifiable and non-quantifiable VMT reductions per Handbook for Analyzing Greenhouse Gas Emission Reductions, Assessing Climate Vulnerabilities, and Advancing Health and Equity Designed for Local Governments, Communities, and Project Developers, California Air Pollution Control Officers Association

(CAPCOA), December 2021 (GHG Handbook). A description of these components and VMT reduction that would be achieved is described below.

- 1. The project will increase residential density. To quantify the VMT reduction that results from increasing residential density, the GHG Handbook T-1 Increase Residential Density reduction measure is used. This component is applicable at the project/site level and VMT reductions are achieved by a project that is designed with a higher density of dwelling units compared to the average residential density. For this application, the project's estimated residential density of 40-50 du/acre is compared to the average residential density in the City of Santa Clarita (5-6 du/acre) and nationwide (9.1 du/acre). Based on the methodology outlined in the GHG Handbook and shown in Appendix K1, although the proposed project density would result in a higher reduction, this measure is capped at 30%. This project component would reduce VMT by 30.0%.
- 2. The project will limit parking supply. The project proposes to construct 13% less parking than the City standard by providing a shared parking provision (see Appendix K4 Final Parking Demand Study). To quantify the VMT reductions related to this site design feature, the GHG Handbook T-15 Limit Residential Parking Supply is utilized. As shown in Appendix K1, this component results in a project VMT reduction of approximately 1.23%.
 - Therefore, the total quantifiable VMT reduction by above mentioned project components is estimated using the formula from the GHG Handbook: % VMT Reduction = 1-(1-A)*(1-B)*(1-C) where A, B, C equals reductions for individual strategies.
 - Project VMT Reduction = 1-(1-30%) * (1-1.23%) = 30.90%
- 3. The project will include a mix of uses, including residential, employment uses, retail, park and open space. The project will have a mix of complimentary land uses, that when near one another, can reduce VMT since non-auto modes of transport can be used to reach destinations. An internal trip capture is an estimate of the number of trips that will remain onsite due to the availability of different land uses. The project's internal trip capture was calculated and included in the project's trip generation estimates, therefore, VMT reductions from this project component were not quantified.
- 4. The project will provide on-site bicycle parking. The project will provide additional bicycle parking spaces. T-34 Provide Bike Parking measure in the GHG Handbook is listed as a supporting or non-quantified GHG reduction measure and quantification methods are not provided. Supporting or non-quantified measures are described as enhancing the ability of quantified measures to attain expanded reductions and cobenefits per GHG Handbook. Therefore, potential VMT reductions from this project component are not quantified for this analysis.
- 5. The project will improve pedestrian connectivity by constructing an on-site pedestrian network and will improve the existing off-site pedestrian network by filling in gaps for pedestrian connectivity. This measure is listed in the City's guidelines and aligns with General Plan Policy C 7.2. The project will construct pedestrian improvements per City standards. The applicant will work with the City to design sidewalks and/or shoulders and trails that will facilitate pedestrian movements throughout the project and connect to pedestrian improvements off-site. The sidewalks and/or shoulders will link areas within the project site and encourage residents to walk to the private recreational area and the trails for exercise. The project will not build walls, landscaping, or slopes that impede pedestrian circulation. The project will also fill in gaps, where needed, that will aid in pedestrian circulation. VMT reductions from this project component are quantified using the GHG Handbook's T-18 Provide Pedestrian Network Improvement and results in a 3% VMT reduction. However, the scale of application for this measure is at the Plan/Community level and, per

the GHG Handbook, cannot be combined with measures at the project/site level. Therefore, VMT reductions from this measure are not incrementally added to the reductions noted above.

6. The project will provide traffic calming features per City standards and City staff recommendations and will also exceed the minimum requirements by constructing a Class I multi-use trail on Wiley Canyon Road. The City guidelines states that when pedestrian/bicycle safety and traffic calming measures are provided in excess of the City's requirements, VMT can be expected to be reduced. This strategy aligns with the General Plan Policy C 1.1.7. The project roadways will be designed consistent with City standards and the applicant will work with the City to design the roadways in such a way to reduce motor vehicle speeds and encourage bicycle and pedestrian trips. The project will provide traffic calming features that includes roundabouts at three intersections and marked crosswalks on Wiley Canyon Road, and the project will also provide a roundabout on site.

The project's Class I multi-use trail will connect to Calgrove Boulevard to the south and Calgrove Boulevard will be restriped to provide Class II bicycle lanes. The City identifies Wiley Canyon Road as a Class III bicycle route. The multi-use trail would provide non-motorized connectivity to the greater Santa Clarita Valley area. The project would not block or impede future bicycle facilities (Existing and Future bicycle facilities are shown in Figure 4.16-4). T-35 Provide Traffic Calming Measures is categorized in the GHG Handbook as a supporting or non-quantified GHG reduction measure and quantification methods are not provided. Therefore, VMT reductions from this project component are not quantified for this analysis.

7. The project will provide features on-site that encourage remote work and telecommuting. More people are choosing to work remotely or telecommute full-time or for a couple days a week. The project will provide features that will make remote work accessible, such as free WIFI at common areas (e.g., local retail stores, recreational areas) and business center at the multi-family residential buildings, which will reduce VMT. T-42 Implement Telecommute and/or Alternative Work Schedule Program is categorized in the GHG Handbook as a supporting or non-quantified GHG reduction measure and quantification methods are not provided. Therefore, potential VMT reductions from this project component are not quantified for this analysis.

Table 4.16-5. VMT Summary

Criteria	Residential use	Employee use
Project Land use	379 multi-family units	217 - CCRC Units
TAZ 20236200 Population & Employment	1,166 persons	207 employees
Santa Clarita Average Home-Based VMT per capita	22.72 VMT per capita	18.45 VMT per employee
Threshold of Significance (15% below baseline)	19.3 VMT per capita	15.7 VMT per employee
Baseline Project/TAZ VMT	21.86 VMT per capita	17.81 VMT per employee
Project VMT with Reduction from PDFs	15.11 VMT per capita	12.31 VMT per capita
Difference (Project VMT with Project Components minus Citywide Threshold)	-4.2 VMT per capita	-3.4 VMT per employee
Is Project above or below Regional Threshold?	Below	Below
Significant Transportation Impact	No	No

Source: Appendix K1.

For the residential portion of the proposed project, the project VMT is 15.11 VMT per capita with VMT reductions from project components (or Project Design Features). The threshold of significance for the City is 19.3 VMT per

capita. Because the proposed project's VMT per resident is below the threshold, the residential portion of the project would result in a **less than significant impact**. No mitigation is required.

For the employment portion of the proposed project, the project VMT for the 12.31 VMT per employee with VMT reductions from project components (or Project Design Features). The threshold of significance is 15.7 home-based work VMT per employee. Therefore, since the employment portion of the project falls below the threshold, the employment portion of the project would result in a **less than significant impact**. No mitigation is required.

Therefore, the proposed project would not conflict with CEQA Guidelines Section 15064.3(b) related to the VMT threshold. Impacts would be **less than significant**, and no mitigation is required.

Threshold TRA-3. Would the project substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

The proposed project would be accessed a private street connected to Wiley Canyon Road, south of Wabuska Street. An emergency vehicle access is proposed via Hawkbryn Avenue. The project driveway intersection along Wiley Canyon Road has been analyzed as a roundabout and will be improved and designed per City's design standards to accommodate project traffic. As shown in the TA, for project's cumulative traffic effect at the Wiley Canyon Road and Wabuska Street intersection, the project would pay its fair share towards installation of a roundabout or traffic signal.

The project's TA includes analysis of Caltrans facilities in the study area. The project's effects and recommended improvements are included in the TA for the following facilities:

- I-5 Northbound Ramps/ Lyons Avenue (Signalized)
- I-5 Southbound Ramps/ Calgrove Boulevard (Unsignalized)
- I-5 Northbound Ramps/Calgrove Boulevard (Unsignalized)

The intersection analysis for the I-5 Southbound Ramps/ Calgrove Boulevard and I-5 Northbound Ramps/ Calgrove Boulevard intersections is included in Appendix K5. As noted in the project's TA, for project's effects at southbound and northbound I-5 ramps at Calgrove Boulevard, the project would pay or construct the improvements, which is proposed either a roundabout or traffic signal, at the discretion of Caltrans. For the project's cumulative traffic effect at the I-5 Northbound Ramps/Lyons Avenue intersection, the project would pay its fair share towards traffic signal adjustment/retiming.

No hazardous geometric design features would be part of the project's roadway improvements. Therefore, impacts associated with hazardous design features or incompatible uses in conjunction with the implementation of improvements would be **less than significant**. No mitigation is required.

Threshold TRA-4. Would the project result in inadequate emergency access?

All areas of the project site would be accessible to emergency responders during both construction and operation. Local access to the proposed project would be provided via a private street connected to Wiley Canyon Road south of Wabuska Street via a roundabout. The roundabout would be designed and constructed per City's design standards. Similarly, the internal drive aisles and loading and parking areas would be designed to comply with City's width, clearance, and turning radius requirements. Additionally, an emergency access is proposed from north of the property from Hawkbryn Avenue, which could be used as an emergency evacuation route during natural disasters like fire.

The proposed project would provide adequate access to the project site, including access for emergency vehicles. The project applicant would be required to design, construct, and maintain structures, roadways, and facilities to comply with applicable local, regional, state, and/or federal requirements related to emergency access and evacuation plans. The mitigation measures related to emergency access and evacuation plans for the proposed project are described in detail in Section 4.19, Wildfire. The proposed site plan, including the roundabout at the access, will be reviewed and approved by the fire department during plan check review.

Adherence to these requirements would ensure that impacts due to inadequate emergency access are below a level of significance. Therefore, impacts associated with inadequate emergency access would be **less than significant**. No mitigation is required.

4.16.6 Project Design Features and Mitigation Measures

The Project Design Features (PDFs) that reduce project's VMT are listed below. No mitigation measures are required.

- PDF-TRA-1 Increase residential density. By constructing dwelling units at a density of approximately 40-50 du/acre, the project will increase residential density compared to the average residential density in the City of Santa Clarita (5-6 du/acre) and nationwide (9.1 du/acre).
- PDF-TRA-2 Limit Parking Supply. The project will limit parking supply by constructing 13% less parking than the City standard by providing a shared parking provision.
- PDF-TRA-3 Mix of uses. The project will include a mix of complimentary land uses, including residential, employment uses, retail, park and open space that when near one another, reduce VMT since non-auto modes of transport can be used to reach destinations.
- PDF-TRA-4 Provide on-site Bicycle Parking. The project will provide additional bicycle parking spaces.
- PDF-TRA-5 Improve Pedestrian Connectivity. The project will construct an on-site pedestrian network and will improve the existing off-site pedestrian network by filling in gaps for pedestrian connectivity.
- PDF-TRA-6 Provide Traffic Calming Features. The project will provide traffic calming features that includes roundabouts at three intersections and marked crosswalks on Wiley Canyon Road, and the Project will also provide a roundabout on-site.
- PDF-TRA-7 Encourage Remote Work and Telecommuting. The project will provide features on-site that encourage remote work and telecommuting. such as free WIFI at common areas (e.g., local retail stores, recreational areas) and business center at the multi-family residential buildings, which will reduce VMT.

4.16.7 Level of Significance After Mitigation

The project would result in less than significant impacts. No mitigation measures are required.

4.16.8 Cumulative Effects

The cumulative effects evaluate the long-term project effects on VMT. As noted in the City's Guidelines, cumulative effects are determined through consistency with the SCAG RTP/SCS. Projects that are consistent with the RTP/SCS in terms of location, density and intensity would have a less than significant cumulative impact on VMT. The project is in the City of Santa Clarita. The project land use is consistent with the City's General Plan Mixed-Use Neighborhood designation for the project site and project's consistency with goals of RTP/SCS are evaluated in Table 4.16-4. Since the project is consistent with the RTP/SCS, the project would result in a less than significant cumulative effect.

4.16.9 References Cited

- Caltrans. 2020. Transportation Impact Study Guide. Vehicles Miles Traveled-Focused Draft. February 2020.
- CAPCOA (California Air Pollution Control Officers Association). 2021. Analyzing Greenhouse Gas Emission Reductions, Assessing Climate Vulnerabilities, and Advancing Health and Safety, Final Draft.

 December 2021. https://www.caleemod.com/documents/handbook/full_handbook.pdf.
- City of Santa Clarita. 2020. City of Santa Clarita Non-Motorized Transportation Plan. September 2020. https://filecenter.santa-clarita.com/bike/Santa%20Clarita%20NMTP%2010-29-2020_SEPT2020.pdf
- City of Santa Clarita. 2020a. *Transportation Analysis Updates in Santa Clarita*. May 2020. Accessed http://santaclaritacityca.iqm2.com/Citizens/Detail_LegiFile.aspx?Frame=&MeetingID= 2178&MediaPosition=7063.360&ID=2931&CssClass=.
- City of Santa Clarita. 2020b. "Addendum to the City Guidelines and Procedures for Implementation of the California Environmental Quality Act Relating to Adopting Vehicle Miles Traveled Thresholds Pursuant to Senate Bill 743." Resolution No. 20-51. June 23, 2020. http://santaclaritacityca.iqm2.com/Citizens/Detail_LegiFile.aspx?Frame=&MeetingID=2178&MediaPosition=7063.360&ID=2931&CssClass=.
- ITE (Institute of Transportation Engineers). 2021. Trip Generation Manual, 11th ed. Washington DC: ITE.
- OPR (California Governor's Office of Planning and Research). 2018. Technical Advisory on Evaluating Transportation Impacts in CEQA. December 2018. Accessed June 2020. http://opr.ca.gov/docs/20190122-743_Technical_Advisory.pdf.
- SCAG (Southern California Association of Governments). 2020. 2020-2045 Regional Transportation Plan/Sustainable Communities Strategy. Accessed October 2020. https://www.connectsocal.org/Documents/Adopted/0903fConnectSoCal-Plan.pdf.

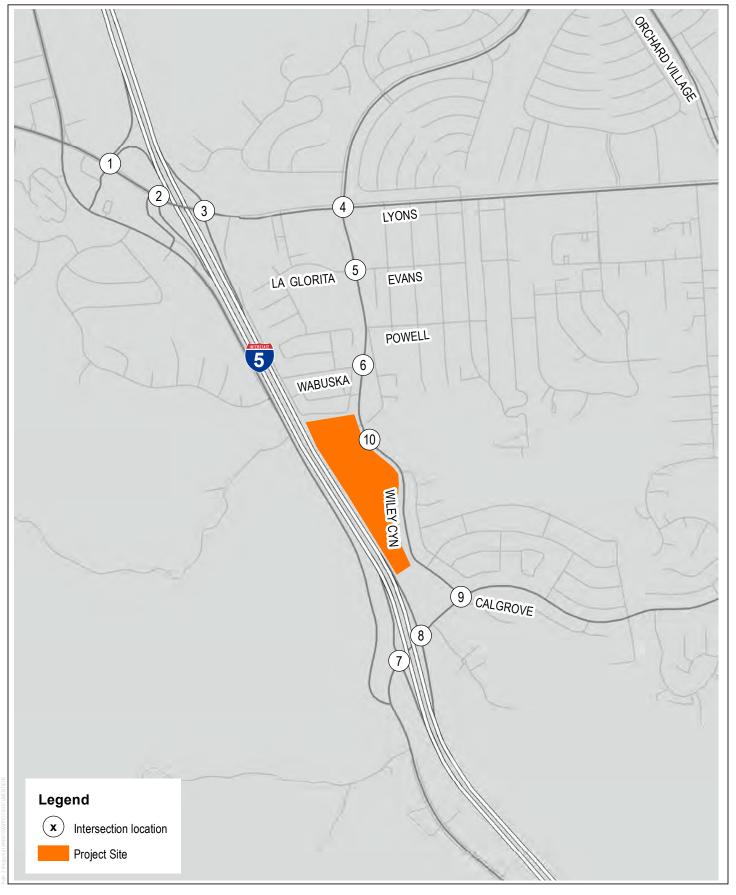
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SOURCE: Wiley Canyon Mixed-Use Project VMT Analysis, 2022



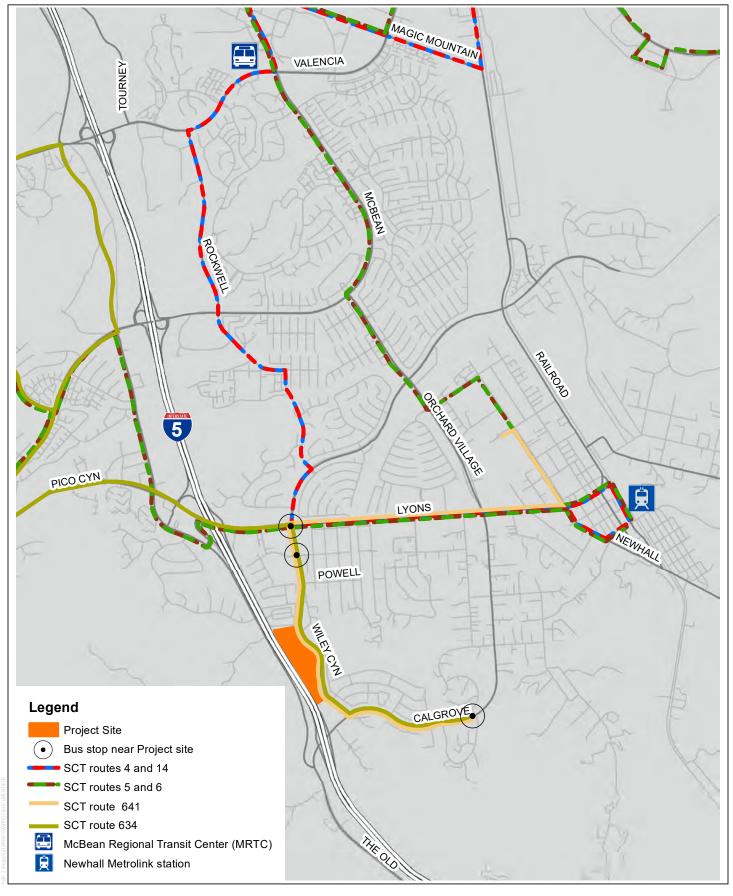
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SOURCE: Wiley Canyon Mixed-Use Traffic Analysis, 2022

FIGURE 4.16-2

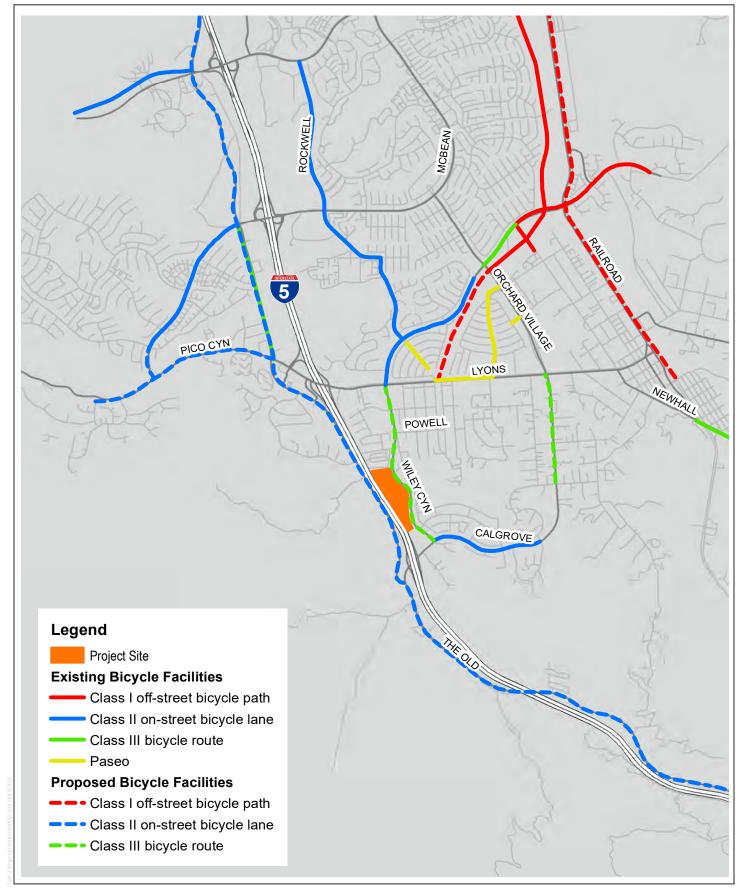
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SOURCE: Wiley Canyon Mixed-Use Traffic Analysis, 2022

FIGURE 4.16-3

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SOURCE: Wiley Canyon Mixed-Use Traffic Analysis, 2022

FIGURE 4.16-4

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4.17 Tribal Cultural Resources

This section discusses potential impacts to tribal cultural resources (TCRs) resulting from implementation of the proposed Wiley Canyon Mixed Use Project, City of Santa Clarita, California (project).

The analysis is based on a review of existing cultural resources; technical data; and applicable laws, regulations, and guidelines and is derived from the Cultural Resources Assessment Report prepared by ESA in May 2022 (Appendix D of this Environmental Impact Report [EIR]) and from information gathered from Assembly Bill 52 consultations meetings.

As discussed in Chapter 3, Project Description, of this EIR, the proposed project site consists of approximately 31.8 acres of vacant land proposed for redevelopment. The project proposes separating the existing property into six separate lots (ranging in size from 31,011 square feet (0.71 acres) to 356,007 square feet (8.1 acres)) and the redevelopment of existing vacant land with a new mixed-use development consisting of the following components:

- 277,108-square-foot senior living facility
- 8,914 square feet of commercial space
- 379 multifamily residential units
- Publicly accessible outdoor recreational field space, including 1.3 miles of pedestrian and bike trails
- Off-site circulation improvements (e.g., new roundabouts, traffic signals, Class I and II bike lanes on Wiley Canyon Road and Calgrove Boulevard, and pedestrian trails).

4.17.1 Environmental Setting

The project site is located on the southern margin of the Santa Clarita Valley within the Transverse Ranges geomorphic province of California, which is characterized by east-west trending mountains and faults. The Santa Clarita Valley is bounded by the San Gabriel Mountains to the east and southeast, the Santa Susana Mountains to the southwest, the Topatopa and Piru Mountains to the north and northwest, and the Sierra Pelona Mountains to the northeast. The project site is located in the Upper Santa Clara River East Subbasin hydraulic area. Surface water is drained by the Santa Clara River, Bouquet Creek, and Castaic Creek (Santa Clarita Valley Groundwater Sustainability Agency 2022). The South Fork of the Santa Clara River, located on the eastern margin of the project site, leads to the Santa Clara River approximately 3.75 miles northeast of the project site. Native vegetation in the Santa Clarita Valley historically consisted of coastal sage scrub, riparian woodlands, and freshwater marsh habitats (City of Santa Clarita, 2012).

The surficial geology of the project site primarily consists of Holocene-age (<11,700 years old) undifferentiated alluvial deposits; however, the project site's northwestern corner is comprised of hills and is mapped as the Late Pliocene to the Early Pleistocene (3.6 to 1.8 million years ago) Saugus Formation. The undifferentiated alluvial deposits were transported to the project site via the south fork of the Santa Clara River from the Santa Susana Mountains. A review of the geotechnical studies that address the project site indicate that the alluvial deposits extend to a depth of approximately 65 to 75 feet below surface, where it is in contact with Saugus Formation bedrock (Seward and Callahan 2018). The portions of the project site mapped as undifferentiated alluvial deposits have high potential for the presence of buried archaeological materials given that the age of these deposits encompass the entirety of the region's human occupation and that buried soil profiles may be present within these deposits at depths ranging from 41 to 58 inches.

Soils within the project site primarily consists of the Yolo series; however, the northeastern corner of the project site consists of the Saugus series. The Yolo soils are formed in alluvium from mixed rocks and are found on alluvial fans and flood plains and includes buried soil profiles, which are past landforms that may have been occupied by prehistoric peoples and subsequently sealed by deposits of more recent alluvium. The Saugus soils occur on steep slopes at elevations of 600 to 2,500 feet with slopes ranging from 9 to 50 percent, and are subject to erosion and are therefore, not conducive for the preservation of archaeological deposits.

Existing Conditions

The project site consists of approximately 31.8 acres of vacant land located at 24924 Hawkbryn Avenue, within the Newhall area of the City of Santa Clarita (City) including Assessor Parcel Numbers (APNs): 2825-012-007, 2825-012-010, 2825-012-011, 2825-012-901, and 2825-012-902. Specifically, the project site is located in Township 3 North, Range 16 West, Sections 4, 9, and 10, as shown on the U.S. Geological Survey 7.5-minute Oat Mountain Quadrangle topographic map.

The project site is currently vacant except for two single-story metal buildings, two mobile homes, former mule barns, and one drained, man-made water basin associated with the former Smiser Mule Ranch which historically occupied the site.

As identified in ESA Cultural Resources Assessment Report (2022) prepared for the project site, the northern portion of the site has been historically used as a mule ranch and pastureland. Two on-site structures consist of approximately 6,750 square feet and approximately 9,380 square feet in size, both with steel frames on reinforced concrete slab foundations with metal roofing and metal exterior walls constructed in 1978 and 1980, respectively (see Appendix D, Cultural Resources Assessment Report). Historic uses of the Smiser Mule Ranch include ranch operations and on-site residences. The project site was last used as a woodshop for furniture and cabinet manufacturing within the existing metal buildings and is currently used for recreational vehicle (RV) and boat storage.

The northeastern portion of the project site, east of Wiley Canyon Road, consists of vacant land on an elevated hillside. This portion of the site is improved with an existing retaining wall and dirt roadways that provide access for an existing easement owned and maintained by the Los Angeles County Public Works, Flood Control District to accommodate drainage flow associated with the South Fork of the Santa Clara River.

Prehistoric Setting

The chronology of Southern California is typically divided into three general time periods: the Early Holocene (9,600 cal B.C. to 5,600 cal B.C.), the Middle Holocene (5,600 cal B.C. to 1,650 cal B.C.), and the Late Holocene (1,650 cal B.C. to cal A.D. 1769). This chronology is manifested in the archaeological record by particular artifacts and burial practices that indicate specific technologies, economic systems, trade networks, and other aspects of culture.

While it is not certain when humans first came to California, their presence in Southern California by about 9,600 cal B.C. has been well documented. At Daisy Cave, on San Miguel Island, cultural remains have been radiocarbon dated to between 9,150 and 9,000 cal B.C. (Byrd and Raab 2007). During the Early Holocene (9,600 cal B.C. to 5,600 cal B.C.), the climate of Southern California became warmer and more arid and the human populations, who were represented by small hunter gathers until this point and resided mainly in coastal or inland desert areas, began exploiting a wider range of plant and animal resources (Byrd and Raab 2007).

During the Late Holocene (1,650 cal B.C. to cal A.D. 1769), many aspects of Millingstone culture persisted, but a number of socioeconomic changes occurred (Erlandson 1994; Wallace 1955; Warren 1968). The native populations of Southern California were becoming less mobile and populations began to gather in small sedentary villages with satellite resource-gathering camps. Increasing population size necessitated the intensified use of existing terrestrial and marine resources (Erlandson 1994). Evidence indicates that the overexploitation of larger, high ranked food resources may have led to a shift in subsistence, towards a focus on acquiring greater amounts of smaller resources, such as shellfish and small-seeded plants (Byrd and Raab 2007). Between about A.D. 800 and A.D. 1350, there was an episode of sustained drought, known as the Medieval Climatic Anomaly (MCA) (Jones et al. 1999). While this climatic event did not appear to reduce the human population, it did lead to a change in subsistence strategies in order to deal with the substantial stress on resources.

Given the increasing sedentism and growing populations during the Late Holocene, territorial conscription and competition became acute. Primary settlements or village sites were typically established in areas with available freshwater, and where two or more ecological zones intersected (McCawley 1996). This strategic placement of living space provided a degree of security in that when subsistence resources associated with one ecological zone failed, the resources of another could be exploited (McCawley 1996). Villages typically claimed and carefully defended fixed territories that may have averaged 30-square miles in size encompassing a variety of ecological zones that could be exploited for subsistence resources (McCawley 1996).

The Late Holocene marks a period in which specialization in labor emerged, trading networks became an increasingly important means by which both utilitarian and non-utilitarian materials were acquired, and travel routes were extended. Trade during this period reached its zenith as asphaltum (tar), seashells, and steatite were traded from Catalina Island (Pimu or Pimugna) and coastal Southern California to the Great Basin. Major technological changes appeared as well, particularly with the advent of the bow and arrow sometime after cal A.D. 500, which largely replaced the use of the dart and atlatl (Byrd and Raab, 2007)

Ethnographic Setting

The project site falls within the ethnographic boundary of the Tataviam (Johnson and Earle 1990; King and Blackburn 1978; Kroeber 1925). Tataviam territories included the upper reaches of the Santa Clara River drainage east of Piru Creek, but also encompassed the Sawmill Mountains to the north and the southwestern portion of the Antelope Valley (King and Blackburn 1978). Tataviam territory is bound by various branches of tribes, such as Chumash to the north and west (including the Ventureño to the west, and Castaic and Emigdiano to the northwest), Kitanemuk to the northeast, Serrano to the east, and Gabrielino to the south (King and Blackburn 1978).

Note that there is limited ethnographic data (i.e., data acquired by means of observation or taken from persons who practiced native lifeways) available concerning the Tataviam and their native lifeways. Most of what is known today about the Tataviam comes in the form of ethnohistory (i.e., historical accounts developed through examination of historical records and oral histories) as presented in the works of anthropologists Alfred L. Kroeber (1915, 1925) and John P. Harrington (1935). Their data is largely based on interviews conducted in the early 1900s with a Native American consultant named Juan José Fustero, a man who spoke Kitanemuk and claimed that his grandparents were born near the town of Newhall and spoke a language that is no longer extant (Bright 1975). Most of the subsequent works published on the Tataviam (Bright 1975; Hudson 1982; King and Blackburn 1978), including discussions of their cultural and geographic affiliations, were based on the Kroeber and Harrington interviews with Fustero and several other Kitanemuk consultants. Other studies have analyzed Spanish mission baptismal, marriage, and burial registers in an attempt to better understand the distribution of historic village settlements and kinship ties between settlements (Johnson 1978 and 1997; NEA and King 2004).

Early ethnologies referred to the Tataviam as Ataplili'ish (Kroeber 1915), but Kroeber found this name to be too general since it had already been used to describe other indigenous groups (namely the Gabrielino). Kroeber changed the term to Alliklik (Krober 1925), which was noted to be a Ventureño Chumash name for the group (although it is believed to be a derogatory term for the sound of the language) but offered almost no information concerning their native lifeways. One account of the Tataviam, provides a narrative that they held the river up from a point between Sespe and Piru, most of Piru Creek, Castaic Creek, and probably Pastoria Creek across the mountains in the San Joaquin Valley drainage and adjacent to the Yokuts (Kroeber 1925:613-614).

The Tataviam are linguistically classified as an Uto-Aztecan Serran sub-branch of Takic speaking groups consisting of Kitanemuk, Serrano (including Vanyume), and Tataviam (Golla 2011; Sutton 1980). William Bright has suggested that Tataviam was actually a separate language with Takic affinities, or perhaps a "remnant, influenced by Takic, of a language family otherwise unknown in southern California" (Bright 1975:230). However, the current and most widely accepted view is that Tataviam is in fact a Takic language (King and Blackburn 1978; Johnson and Earle 1990).

King and Blackburn (1978:536) noted several Tataviam settlements based on information provided by Harrington and other sources, including mission registers. Among these is the putative village of tsawayung (also referred to as Chaguayabit, Chaguayanga, takuyama'm), which some believe was located near Castaic Junction at the site of Rancho San Francisco. However, there is a lack of consensus as to the village's exact location. Harrington's own notes reflect this uncertainty: "Jose Juan Olivas thinks it is over by San Francisquito [Rancho San Francisco] but does not know and never did know just where" (NEA and King 2004:119). Based on diary entries from the Portolá Expedition (Perkins 1957), some have hypothesized that Estancia San Francisco de Xavier (often incorrectly referred to as an asistencia) was placed at the location of the village of tsawayang, but this is based on descriptive diary entries and has never been confirmed by archaeological or other historic evidence. In fact, no physical evidence of the village has ever been found. Other Tataviam villages mapped outside of the project area include tikatsing located on upper Castaic Creek, and pi'ing located where Castaic Creek meets Elizabeth Lake Canyon. The village of Tochonaga, was recorded on an 1843 land grant map. This site appears to be located to the southeast of Newhall, but its precise location has also never been confirmed: "Tochononga was located in the mountains northwest of San Fernando...over by Los Alamos somewhere here in the Tejon Ranch" (NEA and King 2004:117). Other villages and seasonal camp sites identified by Harrington include akure'eng, which was located at the original Newhall town site; apatsitsing, located on upper Castaic Creek; and nagava'atang, located east of Townsend Peak. Piru Creek also contained several village and rancheria sites, located on the northern edge of Tataviam territory (Johnson and Earle 1990).

Pedro Fage's account of the 1769 Portola expedition indicates that the first Chumash settlement encountered upon leaving Tataviam territory was located west of the mouth of Piru Creek. The village of *kamulus* (*Camulos*), located east of Piru Canyon, bears a Chumash name (Johnson and Earle 1990), leading to speculation that this village consisted of a mixed Chumash-Tataviam population. There has been much discussion regarding Chumash ties to areas generally accepted as Tataviam territory (Beeler and Klar 1977).

More recent studies have examined additional Tataviam investigations conducted by Harrington with neighboring groups (Johnson and Earle 1990). These studies support the original Kroeber and Harrington findings that the Tataviam were a distinct group:

The correspondence between (1) ancestral villages traced using genealogical evidence and (2) independently elicited information regarding Tataviam territoriality builds confidence in the reliability of the ethnographic record compiled by Kroeber and Harrington. The distinctiveness of

the Tataviam as an ethnic entity, separate from the Kitanemuk and Fernandeño, is supported by our research (Johnson and Earle 1990:209).

In 1996, as the result of a Caltrans District 7 highway widening project for State Route (SR)-126, archaeologists discovered and excavated 45 burials from CA-LAN-2233, a prehistoric village site dating from approximately 2000 to 1640 years before present (BP) and located within Tataviam territory. Examination of mitochondrial DNA (mtDNA) from five burials at CA-LAN-2233 found that these individuals were genetically linked to modern Uto-Aztecan speaking groups, such as the Tataviam (Sutton 2009).

4.17.1.1 Background Research

California Historical Research Information System (CHRIS) Records Search

A CHRIS records search for the project site and a 1-mile radius was completed on April 15, 2020 at the South Central Coast Information Center (SCCIC). The records search included a review of all recorded cultural resources and previous studies within the project's records search area.

Previously Conducted Cultural Resource Studies

The SCCIC records indicate that 31 previous cultural resources studies have been conducted within a 1-mile radius of the project site. Of these, four previous studies overlap the project site, encompassing roughly 80% of the project site. One additional study (W&S Consultants, 2007) not on file at the SCCIC, was identified and includes the entirety of the project site. Table 4.17-1, below, provides a complete list of all 31 previous cultural resources studies within 1-mile of the project site, including the study not on file with the SCCIC.

Table 4.17-1. Previous Cultural Resource Studies Within 1.0-Mile of the Project Site

Report Number	Author	Year	Report Title	Proximity to Proposed Project Site
*Not assigned	W&S Consultants	2007	Intensive Phase I Archaeological Survey of the Smiser Ranch, Santa Clarita, Los Angeles County, California	Outside
LA-00023	Leonard, Nelson N.	1974	Archaeological Reconnaissance of Tentative Tract # 31399, a Residential Development Near Newhall California	Outside
LA-00103	Singer, Clay A.	1975	Archaeological Resource Survey of Portions of the South Fork, Santa Clara River, Los Angeles County, California	Overlaps
LA-00290	Desautels, Roger J.	1976	Archaeological Survey Report on Acre Parcel of Land Located in the Newhall Area of the County of Los Angeles, California	Outside
LA-00510	Van Horn, David M.	1979	Preliminary Archaeological Overview: a 3,000+/- Acre Parcel Bordering Potrero Canyon Near Newhall, CA	Outside
LA-00578	Baksh, Michael G.	1979	Archaeological Evaluation of Tentative Tract No.35555, Los Angeles County, California	Outside
LA-00773	Salls, Roy A.	1980	Cultural Resources Investigation of the Proposed Land Division Map Number 12292	Outside

Table 4.17-1. Previous Cultural Resource Studies Within 1.0-Mile of the Project Site

Report Number	Author	Year	Report Title	Proximity to Proposed Project Site
LA-00842	Singer, Clay A.	1977	Archaeological Survey and Cultural Resource Assessment for a Portion of Towsley Canyon, Near Newhall, Los Angeles County, California	Outside
LA-01062	Schilz, Allen J.	1981	Archaeological Survey of the Sylmar Development Project Site, Los Angeles County, California	Outside
LA-01595	Brown, Robert S. and David M. Van Horn	1984	Archaeological Survey Report: a 400+ Acre Tract Located in the Santa Susana Mountains West of Newhall, California	Outside
LA-01978	Salls, Roy A.	1990	Report of Archaeological Reconnaissance Survey of Santa Clarita, California-Newhall Carrier Annex Environmental Assessment, ESA Project Number 9094c Newhall, California	Outside
LA-02305	Moratto, Michael J.	1990	Cultural and Paleontological Resources in the Santa Susana and Santa Monica Mountains, Los Angeles County, California	Outside
LA-02721	Weber, Carmen A. and Dave Ferraro	1992	Cultural Resources Survey 82.7 Acre Parcel Near Newhall Tentative Parcel Map No. 8576	Outside
LA-02848	Peak and Associates, Inc.	1992	Cultural Resource Assessment of the Proposed Newhall Alternate Alignment, Ventura and Los Angeles Counties, California	Outside
LA-02950	Anonymous	1992	Consolidated Report: Cultural Resource Studies for the Proposed Pacific Pipeline Project	Outside
LA-02951	Gibson, Robert O.	1993	Results of Archaeological Records Review for the Pacific Pipeline Project Emidio Lateral Pipeline Kern and Los Angeles Counties, CA	Outside
LA-03000	Simon, Joseph M. and David S. Whitley	1993	Phase I Archaeological Survey and Cultural Resources Assessment for the 225 Acres Alternative Site 2 Study Area, Santa Clarita, Los Angeles County, California	Outside
LA-03116	Singer, Clay A., John E. Atwood, and Shelley M. Gomes	1994	Cultural Resources Survey and Impact Assessment for a 0.25 Acre Lot Located at 24626 Apple Street in the Community of Newhall, Los Angeles County, California	Outside
LA-04008	Unknown	1996	Cultural Resources Investigation Pacific Pipeline Emidio Route	Outside
LA-05533	Smith, Philomene C.	2000	Negative Archaeological Report: Rock-lined Section and the Addition of an Access to Paved Section of Drainage Channel Near Interstate 5 in Santa Clarita	Overlaps
LA-05855	Anonymous	2001	Phase I Archaeological Survey of the 558 Acres Old Road Study Area, Los Angeles County, California	Outside

Table 4.17-1. Previous Cultural Resource Studies Within 1.0-Mile of the Project Site

Report Number	Author	Year	Report Title	Proximity to Proposed Project Site
LA-08958	Tsunoda, Koji and A. Moreno	2007	Archaeological Survey Report for Southern California Edison Company Saugus, North Oaks FO Cable Project Los Angeles County, California (WO#8456-0639, JO#6155)	Outside
LA-09062	Slawson, Dana N.	2004	Archaeological Investigation for NCWD Peachland Reservoirs: 18-Inch Pipeline and Access Road Improvements Project	Outside
LA-09063	Schmidt, June A.	2003	Negative Archaeological Survey Report: Church of the Nazarene (c.u.p. No. 03-090) 23857 The Old Road, Santa Clarita, Los Angeles County	Outside
LA-00906	Shepard, Richard S.	2004	Phase I Cultural Resource Assessment for Lyons Canyon Ranch Specific Plan, Tentative Tract Map 53653, Santa Clarita, Los Angeles County, California.	Outside
LA-10511	McKenna, Jeanette	2005	A Phase I Cultural Resources Investigation of Aidlin Casad Tract No. 52905, Approximately 95 Acres in the Lyon Canyon Area of Los Angeles County, California	Outside
LA-10578	Fortier, Jana	2009	TEA21 Rural Roadside Inventory: Native American Consultation and Ethnographic Study Caltrans District 7, County of Los Angeles	Outside
LA-11594	Bonner, Wayne	2011	Cultural Resources Records Search and Site Visit Results for AT&T Mobility, LLC Candidate NLO443-01 (Newhall Water Tank), 4750 Fambrough Street, Santa Clarita, Los Angeles County, California	Outside
LA-11985	McKenna, Jeanette	2012	A Class III/Section 106 and Phase I CEQA Cultural Resources Investigation for the Proposed Storm Drain Improvement Areas in the Newhall and Santa Clarita Areas of Los Angeles County, California	Overlaps
LA-12526	Ehringer, Candace, Katherine Ramirez, and Michael Vader	2013	Santa Clarita Valley Sanitation District Chloride TMDL Facilities Plan Project, Phase I Cultural Resources Assessment	Outside
LA-12631	Maxon, Patrick	1999	Cultural Resources Reconnaissance of the Edson (TT 52905) Parcels; Portions of the Aidlin Properties, in the City of Santa Clarita, Los Angeles County, California	Outside
LA-13109	McKenna, Jeanette	2015	A Class III/Section 106 and Phase I CEQA Cultural Resources Investigation for the Proposed Storm Drain Improvement Areas in the Newhall and Santa Clarita Areas of Los Angeles County, California	Overlaps

Previously Recorded Cultural Resources

The records search results indicate nine cultural resources have been previously recorded within a 1-mile radius of the project site. Of these, one is a prehistoric archaeological site; two are historic-period archaeological sites; four are historic built environment resources; one is a prehistoric isolate; and one is a historic-period isolate. No cultural resources have been previously recorded within or immediately adjacent to (within 200 feet of) the project site. Table 4.17-2, below, provides a summary of only those resources associated with Native American activity. All nine previously recorded cultural resources within 1-mile of the project site can be found in Section 4.4, Cultural Resources.

Table 4.17-2. Previously Recorded Cultural Resources Within 1.0-Mile of the Project Site

Primary Number (P-19-)	Trinomial (CA-LAN-)	Resource Type and Age	Description	Year Recorded	NRHP/CRHR Status
000802	000802	Archaeological Site: Prehistoric	Lithic scatter	1977	Not evaluated
101350	_	Archaeological Isolate: Prehistoric	Hammerstone	2015	Not evaluated

Notes: NRHP = National Register of Historic Places; CRHR = California Register of Historical Resources.

Historic Aerial Review

The following section is taken from the ESA cultural resources report (Vader and Gonzalez 2022: 23-24 [edits for the purposes of this EIR chapter are in brackets]):

Historic maps and aerial photographs were examined to provide historic information about land uses of the APE [project site for purposes of this document] and to contribute to an assessment of the [project site]'s archaeological sensitivity. Available topographic maps include the 1903 and 1941 Santa Susanna 15-minute quadrangles, the 1929 and 1933 Newhall 7.5-minute quadrangles, and the 1952 Oak Mountain 7.5-minute quadrangle. Historic aerial photographs were available for the years 1947, 1959, 1969, 1972, 1977, 1980, 1994, 2005, and 2016 (NETR 2020).

The available historic maps and aerial photographs indicate the [project site] has largely been used for agricultural purposes through the present, and its vicinity remained largely rural through the 1960s when suburban development began to encroach into the areas bounding the [project site]. The 1903 map shows a north-south oriented road corresponding to present-day Wiley Canyon Road bounding the [project site's] eastern margin and a north-south oriented ephemeral stream bisecting the center of the [project site]. The 1929, 1933, 1941, and 1952 maps show the generally north-south oriented Highway 99 bounding the [project site's] western margin.

The historic aerial photographs largely reflect what is depicted in the topographic maps in that the [project site] and its immediate vicinity were largely used for agricultural purposes during the mid-20th century, but by the 1960s suburban development began to encroach into the [project site's] vicinity. The 1947 and 1959 photographs show the [project site] as open fields bounded by

Highway 99 to the west and Wiley Canyon Road to the east. The 1969 photograph shows a residential subdivision and a mobile home park being constructed southeast and north of the [project site], respectively. The 1972 and 1977 photographs show the mobile home park was extended south to the [project site's] northern margin.

The 1980 aerial photograph shows two warehouse-type buildings in the northern portion of the [project site] and a small stock pond along the [project site's] northwestern margin. The 1994, 2005, and 2016 aerial photographs show the [project site's] present layout which consists of open fields in its central and southern portions, and warehouse buildings in the northern portion.

In sum, the historic map and aerial review indicate the [project site] and its vicinity were largely used for agricultural purposes until the 1960s when suburban development began to encroach along the [project site's] margins. Aerial photographs show that between 1977 and 1980 two warehouse structures were constructed in the [project site's] norther[n] portion and a stock pond was established along the [project site's] northwestern margin, all of which are extant.

Native American Coordination

Native American Heritage Commission Sacred Lands File

ESA requested the Native American Heritage Commission (NAHC) search its Sacred Lands File (SLF) on January 23, 2020 for the project site. These resources may not be included in the SCCIC database. The NAHC responded on February 6, 2020, with negative results. Because the SLF search does not include an exhaustive list of Native American cultural resources, the NAHC suggested contacting Native American individuals and/or tribal organizations who may have direct knowledge of cultural resources in or near the project site. Outreach letters were mailed on March 10, 2023 to all Native American group representatives included on the NAHC contact list. These letters attempted to solicit information relating to Native American resources that may be impacted by the project. Native American representatives were requested to define a general area where known resources intersect the project area. Follow-up phone calls were conducted on March 17 and 31, 2020 followed by follow-up emails sent on April 6, 2020. Three responses have been received to date.

A response was received from the Gabrieleno Band of Mission Indians – Kizh Nation (Kizh Nation) dated March 17, 2020, stating that the project site is located within the tribe's territory and requested to schedule consultation with the lead agency to discuss the project. A response was received from the Fernandeño Tataviam Band of Mission Indians (FTBMI), dated April 8, 2020, stating that the project is located within Tataviam Ancestral territory and that a number of cultural resources have been previously recorded in the vicinity of the project site including, a rock shelter containing rock art, natural oil resources traditionally used by indigenous peoples, and the Tataviam village of *Tochonanga* and requested consultation. A response was received from the Santa Ynez Band of Chumash Indians (Santa Ynez), dated April 16, 2020, stating that the tribe would not be commenting on the project and deferred to the FTBMI.

Assembly Bill 52

Assembly Bill (AB) 52 defines tribal cultural resources (TCRs) as those resources identified by tribal individuals that are eligible for or listed in the California Register of Historical Resources, or resources that are accompanied by substantial evidence such that the lead agency designates a resource as a TCR. As such, it is appropriate to review

identification of prehistoric archaeological resources that have the potential to be identified by consulting tribes as a TCR, by referring to records searches and cultural resources inventories.

A project with an effect that may cause a substantial adverse change in the significance of a TCR is a project that may have a significant effect on the environment (Public Resources Code section 21084.2). Under AB 52, a TCR must have tangible, geographically defined properties that can be impacted by project implementation.

The project is subject to compliance with AB 52, which requires consideration of impacts to TCRs as part of the CEQA process, and that the lead agency notify California Native American Tribal representatives (that have requested notification) who are traditionally or culturally affiliated with the geographic area of the project. All NAHC-listed California Native American Tribal representatives that have requested project notification pursuant to AB 52 were sent letters by the City of Santa Clarita (City) on February 28, 2022. The letters contained a project description, an outline of AB 52 timing, request for consultation, and contact information for the appropriate lead agency representative. AB 52 allows tribes 30 days after receiving notification to request consultation. If a response is not received within the allotted 30 days, it is assumed that consultation is declined. To date, government-to-government consultation initiated by the City has not resulted in the identification of a TCR within or near the project site. Table 4.17-3 summarizes the results of the AB 52 process for the project. The confidential AB 52 consultation results are on file with the City.

Table 4.17-3. Tribal Outreach Results for Assembly Bill 52-Listed Contacts

Native American Tribal Representatives	Method and Date of Notification	Response to City Notification Letters	Consultation Date and Results
Jairo Avila, Tribal Historic and Cultural Preservation Officer Fernandeño Tataviam Band of Mission Indians	February 28, 2022 via email	March 8, 2022 Request for consultation from Tribe to City	September 21, 2022: AB 52 Consultation was concluded with an agreement reached between the Tribe and the Applicant.

Notes: AB = Assembly Bill; City = City of Santa Clarita.

On March 8, 2022, the FTBMI requested AB 52 consultation for the project, and on September 21, 2022, the AB 52 consultation was concluded and an agreement between the FTBMI and the applicant was reached. No TCRs were identified within the project site, and as a result of the meeting, the following conditions were included into the project: monitoring post project approval during grading to ensure feasible avoidance if any cultural resources are found; if cultural resources are discovered, the FTBMI will work with the developer to potentially avoid the resources or conduct salvage operations, including similar language regarding the discovery of human remains. AB 52 consultation between the FTBMI and the City was concluded on September 21, 2022.

4.17.1.2 Cultural Resource Survey

Field Methods

ESA completed a cultural resources survey of the project site on July 24, 2020. Areas with visible ground surface were subject to pedestrian survey using transect intervals spaced no more than 10 meters (approximately 30 feet) apart and were typically limited to existing dirt roads and trails, on-site ephemeral drainage, areas around existing buildings, and areas along the paved road shoulders. All areas containing accessible boulders and exposed ground

surfaces around them were examined for surface artifacts, rock art, and bedrock milling features. ESA employed an opportunistic survey strategy in areas with slopes greater than 30 percent or thick vegetation, which consisted of intensively examining available clear patches of soil (e.g., animal trails).

Survey Results

The results of the ESA survey were that the majority of the project site is heavily disturbed by previous development, previous agricultural uses including the two existing warehouses and stock pond, the construction of Wiley Canyon Road, and erosion from a north-south trending ephemeral drainage within the project site. Ground visibility was generally poor (rated as 0-50% visibility) in the majority of the project site, as the majority of the project site is densely vegetated with tall grasses and riparian vegetation. ESA employed the opportunistic survey approach in approximately 20% of the riparian areas, and the remaining 80% was not surveyed. In densely vegetated areas, the same approach was used and 40% was surveyed opportunistically, and the remaining 60% of the densely vegetated areas were surveyed using a combination of systematic and opportunistic approaches. The areas with the best visibility (rated as 50-100% visibility) include dirt roads, trails, and areas along the shoulders of existing paved roads and were systematically surveyed. Due to steep slopes and locked gates, the northeastern corner of the APE [project site for purposes of this document], east of Wiley Canyon Road, was not surveyed. No cultural resources were identified as a result of the survey.

4.17.2 Regulatory Framework

State

California Register of Historical Resources

In California, the term "historical resource" includes

any object, building, structure, site, area, place, record, or manuscript which is historically or archaeologically significant, or is significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California. (Public Resources Code section 5020.1[j])

In 1992, the California legislature established the California Register of Historical Resources (CRHR) "to be used by state and local agencies, private groups, and citizens to identify the state's historical resources and to indicate what properties are to be protected, to the extent prudent and feasible, from substantial adverse change" (Public Resources Code section 5024.1[a]). The criteria for listing resources on the CRHR were expressly developed to be in accordance with previously established criteria developed for listing in the National Register of Historic Places (NRHP), enumerated below. A resource is considered historically significant if it (i) retains "substantial integrity," and (ii) meets at least one of the following criteria:

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

To understand the historic importance of a resource, sufficient time must have passed to obtain a scholarly perspective on the events or individuals associated with the resource. A resource less than 50 years old may be considered for listing in the CRHR if it can be demonstrated that sufficient time has passed to understand its historical importance (14 Cal. Code of Regs. section 4852[d][2]).

The CRHR protects cultural resources by requiring evaluations of the significance of prehistoric and historic resources. The criteria for the CRHR are nearly identical to those for the NRHP, and properties listed or formally designated as eligible for listing in the NRHP are automatically listed in the CRHR, as are the state landmarks and points of interest. The CRHR also includes properties designated under local ordinances or identified through local historical resource surveys.

California Environmental Quality Act

CEQA applies to the following analyses of archaeological, historic, and TCRs:

- PRC Section 21083.2(g) defines "unique archaeological resource."
- PRC Section 21084.1 and CEQA Guidelines Section 15064.5(a) defines "historical resources." In addition, CEQA Guidelines Section 15064.5(b) defines the phrase "substantial adverse change in the significance of an historical resource;" it also defines the circumstances when a project would materially impair the significance of a historical resource.
- PRC Section 21074(a) defines "tribal cultural resources."
- PRC Section 5097.98 and CEQA Guidelines Section 15064.5(e) set forth standards and steps to be employed following the accidental discovery of human remains in any location other than a dedicated ceremony.
- PRC Sections 21083.2(b) and 21083.2(c) and CEQA Guidelines Section 15126.4 provide information regarding the mitigation framework for archaeological and historic resources, including examples of preservation-in-place mitigation measures. Preservation in place is the preferred manner of mitigating impacts to significant archaeological sites because it maintains the relationship between artifacts and the archaeological context and may help avoid conflict with religious or cultural values of groups associated with the archaeological site(s).

More specifically, under CEQA, a project may have a significant effect on the environment if it may cause "a substantial adverse change in the significance of an historical resource" (PRC Section 21084.1; 14 CCR 15064.5[b]).

A "substantial adverse change in the significance of an historical resource" reflecting a significant effect under CEQA means "physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of an historical resource would be materially impaired" (CEQA Guidelines section 15064.5[b][1]; PRC Section 5020.1[q]). In turn, the significance of a historical resource is materially impaired when a project does any of the following (CEQA Guidelines section 15064.5[b][2]):

- 1. Demolishes or materially alters in an adverse manner those physical characteristics of an historical resource that convey its historical significance and that justify its inclusion in, or eligibility for, inclusion in the California Register; or
- 2. Demolishes or materially alters in an adverse manner those physical characteristics that account for its inclusion in a local register of historical resources pursuant to Public Resources Codesection 5020.1(k) or its identification in an historical resources survey meeting the requirements of Public Resources Code

- section 5024.1(g), unless the public agency reviewing the effects of the project establishes by a preponderance of evidence that the resource is not historically or culturally significant; or
- Demolishes or materially alters in an adverse manner those physical characteristics of a historical resource
 that convey its historical significance and that justify its eligibility for inclusion in the California Register as
 determined by a lead agency for purposes of CEQA.

Pursuant to these sections, the CEQA inquiry begins with evaluating whether a project site contains any "historical resources," and then evaluates whether that project will cause a substantial adverse change in the significance of a historical resource such that the resource's historical significance would be materially impaired.

If it can be demonstrated that a project will cause damage to a unique archaeological resource, the lead agency may require reasonable efforts be made to permit any or all of these resources to be preserved in place or left in an undisturbed state. To the extent that they cannot be left undisturbed, mitigation measures are required (PRC Section 21083.2).

Public Resources section 21083.2(g) defines a unique archaeological resource as an archaeological artifact, object, or site about which it can be clearly demonstrated that without merely adding to the current body of knowledge, there is a high probability that it meets any of the following criteria:

- 1. Contains information needed to answer important scientific research questions and that there is a demonstrable public interest in that information.
- 2. Has a special and particular quality such as being the oldest of its type or the best available example of its type.
- 3. Is directly associated with a scientifically recognized important prehistoric or historic event or person.

Impacts on non-unique archaeological resources are generally not considered a significant environmental impact. However, if a non-unique archaeological resource qualifies as a TCR, further consideration of significant impacts is required.

CEQA Guidelines Section 15064.5 assigns special importance to human remains and specifies procedures to be used when Native American remains are discovered. These procedures are detailed in PRC Section 5097.98.

Health and Safety Code section 7050.5 and Public Resources Code Section 5097.98

CEQA Guidelines Section 15064.5 assigns special importance to human remains and specifies procedures to be used when Native American remains are discovered. As described below, these procedures are detailed in Health and Safety Code Section 7050.5 and Public Resources Code Section 5097.98.

California law protects Native American burials, skeletal remains, and associated grave goods, regardless of their antiquity, and provides for the sensitive treatment and disposition of those remains. Health and Safety Code section 7050.5 requires that if human remains are discovered in any place other than a dedicated cemetery, no further disturbance or excavation of the site or nearby area reasonably suspected to contain human remains shall occur until the County coroner has examined the remains (Health and Safety Code Section 7050.5[b]). If the coroner determines or has reason to believe the remains are those of a Native American, the coroner must contact the NAHC within 24 hours (Health and Safety Code Section 7050.5[c]). In accordance with Public Resources Code Section 5097.98(a), the NAHC will notify the Most Likely Descendant (MLD). With the permission of the landowner, the MLD may inspect the site of discovery. Within 48 hours of being granted access to the site, the MLD may

recommend means of treatment or disposition, with appropriate dignity, of the human remains and associated grave goods.

Assembly Bill 52

California Assembly Bill 52, establishes a consultation process between California Native American Tribes and lead agencies in order to address tribal concerns regarding project impacts and mitigation to TCRs. Public Resources Code section 21074(a) defines TCRs and states that a project that has the potential to cause a substantial adverse change to a TCR is a project that may have an adverse effect on the environment. A 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:

- 1. listed or eligible for listing in the CRHR or a local register of historical resources, or
- 2. determined by a lead agency to be a TCR.

4.17.3 Thresholds of Significance

Threshold TCR-1a: Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is 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)?

Threshold TCR-1b: Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is a 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.)

4.17.4 Impact Analysis

Threshold TCR-1: Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:

a) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k)?

As discussed in Section 4.4 Cultural Resources, Appendix D and described above, the SCCIC records search results did not identify any previously recorded cultural resources within the project site, the NAHC Sacred Lands File search results were negative, the pedestrian survey did not result in the identification of cultural resources in the project site, and archival research and a review of aerial photographs reveals that the

project area had been disturbed and was largely used for agricultural purposes until the 1960s when suburban development began to encroach along the project site's margins.

Under AB 52, TCRs are defined as resources that are determined eligible for or listed in the CRHR. The City reached out to the FTBMI via certified mail on February 27, 2022 for AB 52 consultations notification. A response was received from the FTBMI on March 8, 2022, requesting AB 52 consultation for the project. On September 21, 2022, an AB 52 consultation meeting was held between the FTBMI and the City. No TCRs were identified within the project site, and as a result of the meeting, the following conditions were included into the project: monitoring post project approval during grading to ensure feasible avoidance if any cultural resources are found; if cultural resources are discovered, the FTBMI will work with the developer to potentially avoid the resources or conduct salvage operations, including similar language regarding the discovery of human remains.

The discovery of TCRs poses a potential significant impact to TCRs; however, implementation of Mitigation Measures MM-CUL-1 through MM-CUL-5 would reduce this impact to less than significant.

b) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe?

Under AB 52, TCRs are defined as resources that the lead agency determines to be a TCR with a substantial burden of evidence. To date, no TCRs have been identified through consultation that would be impacted by project implementation. The discovery of TCRs poses a potential significant impact to TCRs; however, implementation of Mitigation Measures MM-CUL-1 through MM-CUL-5 would reduce this impact to less than significant.

4.17.5 Mitigation Measures

The following mitigation measures would reduce potentially significant impacts to TCRs to a less than significant level.

MM-CUL-1 through MM-CUL-5

4.17.6 Level of Significance After Mitigation

Threshold TCR-1a: Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is 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)?

Implementation of MM-CUL-1 through MM-CUL-5 would ensure that potential impacts to TCRs would remain less than significant.

Threshold TCR-1b: Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is a 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.)

Implementation of MM-CUL-1 through MM-CUL-5 would ensure that potential impacts to TCRs would remain less than significant.

4.17.7 Cumulative Effects

The cumulative impact analysis on TCRs considers whether impacts of the proposed project together with other related projects identified within the vicinity of the project site, when taken as a whole, substantially diminish the number of TCRs within the same or similar context or property type. Four projects have been identified under Table 3-4, Related Projects, of Chapter 3, Project Description, of this EIR. To date, no known TCRs have been identified within the cumulative projects area. The project is required to implement MM-CUL-1, MM-CUL-2, MM-CUL-3, MM-CUL-4, and MM-CUL-5, which would reduce project-related impacts to a less than significant level at the project site. Because there are no known TCRs, the mitigation is for inadvertent discoveries. The project-specific mitigation combined with the mandatory evaluation of potential impacts to other nearby cumulative projects would ensure that there would be **no cumulatively considerable impacts** to TCRs.

4.17.8 References Cited

Aeroflex Corporation. 1959. Imagery Report: Flight AXJ-1959, Frame 16w-50. Electronic resources. http://mil.library.ucsb.edu/apcatalog/report/report.php?filed_by=AXJ-1959, Accessed August 29, 2018

Beeler and Klar 1977

Bright 1975

Byrd and Raab 2007

City of Santa Clarita. 2012. "City Profile". Electronic resource, www.santa-clarita.com/Index.aspx?page=572, accessed February 7, 2012.

Erlandson, Jon M. 1994. Early Hunter-Gatherers of the California Coast, Plenum Press, New York.

FAS (Fairchild Aerial Surveys). 1928. Imagery Report: Flight C-300, Frame F-42. Electronic resources. http://mil.library.ucsb.edu/apcatalog/report/report.php?filed_by=C-300, Accessed August 29, 2018.

FAS. 1940. Imagery Report: Flight AXJ-1940, Frame 320-74. Electronic resources. http://mil.library.ucsb.edu/apcatalog/report/report.php?filed_by=AXJ-1940, Accessed August 29, 2018.

Golla 2011.

Harrington, J.P. 1935.

Johnson 1978.

Johnson 1997.

- Johnson, John R., and David D. Earle. 1990. Tataviam Geography and Ethnohistory. Journal of California and Great Basin Anthropology 12(2):191-214.
- Jones, Terry L., Gary M. Brown, L. Mark Raab, Janet L. McVickar, W. Geoffrey Spaulding, Douglas J. Kennett, Andrew York, and Phillip L. Walker. 1999. Environmental Imperatives Reconsidered: Demographic Crises in Western North America during the Medieval Climactic Anomaly. Current Anthropology, 40(2): 137-70.
- King, Chester J., and Thomas C. Blackburn. 1978. Tataviam. In *California*, edited by Robert F. Heizer, pp. 535-537. Handbook of North American Indians, Vol. 8, W. C. Sturtevant, general editor, Smithsonian Institution, Washington, D.C.

Kroeber, A. L. 1915.

- Kroeber, A. L. 1925. *Handbook of the Indians of California*. Bureau of American Ethnology, Bulletin 78. Smithsonian Institution, Washington, D.C.
- McCawley, William. 1996. The First Angelinos: The Gabrielino Indians of Los Angeles, Malki Museum Press, Banning, California.
- McWilliams, Carey. 1946. Southern California: An Island on the Land, Gibbs Smith, Layton, Utah.
- NEA (Northwest Economic Associates) and C. King, 2004. *Ethnographic Overview of the Angeles National Forest.*Tataviam and San Gabriel Mountain Serrano Ethnohistory. Prepared for US Department of Agriculture.

 Vancouver, WA: Northwest Economic Associates and Topanga, CA: Topanga Anthropological Consultants.
- NETR (Nationwide Environmental Title Research LLC). 2018a. Historic Topographical Maps of Santa Clarita, dating from 1900, 1905, 1910, 1914, 1924, 1930, 1932, 1945, 1946, 1955, 1961, 1964, 1975, 1988, 1994, 1999, 2012, and 2015. Accessed August 2018. https://www.historicaerials.com/viewer.
- NETR. 2018b. Historic Aerial Images of Santa Clarita, dating from 1927, 1954, 1974, 1978, 2005, 2009, 2010, 2012, and 2014. Accessed August 2018. https://www.historicaerials.com/viewer.
- NETR 2020. 1947, 1959, 1969, 1972, 1977, 1980, 1994, 2005, and 2016
- Pacific Air Industries. 1952. Imagery Report: Flight AXJ-1952, Frame 14I-151. Electronic resources. http://mil.library.ucsb.edu/apcatalog/report/report.php?filed_by=AXJ-1952, Accessed August 29, 2018.
- Seward, Eric J. and Kevin P. Callahan. 2018. Geotechnical Summary Report for the Smiser Parcel. Prepared for Sheridan Ebbert Development by Allan E. Seward Engineering Geology, Inc.

Sutton 1980

Sutton 2009

- Tubis, H. 1947. Imagery Report: Flight GS-EM, Frame 3-1. Electronic resources. http://mil.library.ucsb.edu/apcatalog/report/report.php?filed_by=GS-EM, Accessed August 29, 2018.
- USGS (U.S. Geological Survey). 1994. Imagery Report: NAPP 2C, Frame 6866-151. Electronic resources. http://mil.library.ucsb.edu/apcatalog/report/report.php?filed_by=NAPP-2C, Accessed August 29, 2018.
- USGS. 2003. Imagery Report: NAPP 3C, Frame 12462-62. Electronic resources. http://mil.library.ucsb.edu/apcatalog/report/report.php?filed_by=NAPP-3C, Accessed August 29, 2018.
- Vader, M. and M. Gonzalez. 2022. Wiley Canyon (Smiser Ranch) Mixed Use Project, City of Santa Clarita, California. Cultural Resources Assessment Report. Los Angeles: ESA.
- WAC Corp. 1980. Imagery Report: USDA Firescope, Frame 1280 74. Electronic resources. http://mil.library.ucsb.edu/apcatalog/report/report.php?filed_by=USDA-FIRESCOPE, Accessed August 29, 2018.
- W&S Consultants. 2007. Intensive Phase I Archaeological Survey of the Smiser Ranch, Santa Clarita, Los Angeles County, California. Prepared for Monteverde Development by W&S Consultants.
- Wallace, William J. 1955. A Suggested Chronology for Southern California Coastal Archaeology. Southwestern Journal of Anthropology 11:214-230.
- Warren, Claude N. 1968. Cultural Tradition and Ecological Adaptation on the Southern California Coast. In Archaic Prehistory in the Western United States, C. Irwin-Williams, ed, pp. 1-4. Eastern New Mexico University Contributions in Anthropology. Portales.

4.18 Utilities and Service Systems

This section describes the existing utilities setting of the proposed Wiley Canyon Project (project) site, identifies associated regulatory requirements, evaluates potential impacts, and identifies mitigation measures related to implementation of the proposed project. The following is based in part on the following documents:

Appendix L - Water Supply Assessment, Wiley Canyon Mixed-Use Development, June 8, 2022, prepared by Santa Clarita Valley Water District.

Appendix I - Hydrology Technical Memorandum, August 29, 2023, prepared by Alliance Land Planning & Engineering dated.

Appendix M- Sewer Area Study, Wiley Canyon, Santa Clarita, August 10, 2020, prepared by Alliance Land Planning & Engineering.

4.18.1 Environmental Setting

Water Services

The Santa Clarita Water District (SCV Water) is the local regional water wholesaler and retailer for the Santa Clarita Valley. SCV Water meets its potable water demands using a mix of local groundwater, banked groundwater supplies, imported State Water Project (SWP) water, and other imported supplies. In addition, recycled water is delivered to some customers for non-potable uses such as landscape irrigation. The groundwater basin in the Santa Clarita Valley is unadjudicated, meaning that SCV Water does not have specific adjudicated, or defined, water rights or specific limitations that dictate its water supply. However, in practice, SCV Water assesses available groundwater supplies pursuant to appropriative groundwater rights in the basin and in accordance with a groundwater operating plan developed by SCV Water and other retail water purveyors in the Santa Clarita Valley and complemented by analyses based on a numerical groundwater flow model of the basin (Appendix L). SCV Water is also a member of the Santa Clarita Valley Groundwater Sustainability Agency (SCV-GSA) for the Santa Clara River East Subbasin. In 2021, SCV Water's water supplies used consisted of 38.7% from groundwater, 0.7% from recycled water, 28.3% from imported water, and 32.3% from banked groundwater/exchanges (Appendix L). SCV Water also serves Los Angeles County Waterworks District 36 (LACWWD 36).

Groundwater

According to SCV Water, groundwater in the Santa Clarita Valley comes from two sources, the Alluvium Aquifer and the Saugus Formation, both of which are aquifers of the Santa Clara River Valley East Groundwater Basin. The Alluvium Aquifer generally underlies the Santa Clara River and its tributaries to a maximum depth of 200 feet. The Saugus Formation underlies the entire Upper Santa Clara River area to at least a depth of 2,000 feet (SCV Water 2021).

Imported Water

SCV Water typically imports approximately half of its imported water supply from the SWP although in 2021 SWP only made up 40.3% of the imported water supplies (Appendix L). The SWP is a 600-mile, north-south running water supply system that runs from Lake Oroville in northeast Sacramento to Castaic Lake, where it flows through large underground pipelines to supply SCV Water.

According to the 2020 Santa Clarita Valley Water Agency Urban Water Management Plan (UWMP), total water use in the Santa Clarita Valley is projected to be 76,400 acre-feet in 2025 which includes 1,300-acre-feet of potable water for use by LACWWD 36 (SCVWA 2021). According to the UWMP, the SCV Water Agency projects adequate water supplies for all of its retailers through the planning year of 2050. Table 4.18-1 shows the supply and demand projections for SVC Water through 2050.

Table 4.18-1. Wholesale and Retail Water Demand and Supply Projections (AF)

Entity	2025	2030	2035	2040	2045	2050
Retail Water Suppliers						
SCV Water - Potable	72,900	76,100	81,600	84,800	87,500	89,900
SCV Water - Non-Potable	2,300	4,100	5,500	6,900	7,900	9,000
LACWWD 36 - Potable	1,300	1,400	1,600	1,800	2,000	2,200
LACWWD 36 - Non-Potable	0	0	0	0	0	0
Total Use (af)	76,400	81,700	88,700	93,600	97,500	101,000

Source: SCV Water 2021.

Notes: LACWWD 36= Los Angeles County Water Works District 36; AF = acre-feet.

Wastewater Services

The City of Santa Clarita (City) contracts with the Los Angeles County Sewer Maintenance District for the maintenance of its sanitary sewer system. Based on a Los Angeles County Department of Public Works sewer map (LADPW 2016), there are existing public wastewater drain lines in the area that include a 12-inch vitrified clay pipe (VCP) in Wiley Canyon Road and an 8-inch line in Wabuska street (note that this 2016 map does not include Hawkbryn Avenue).

Wastewater from the area of the project site is treated by the Los Angeles County Sanitation District (LACSD) at the Saugus Water Reclamation Plant (WRP) and at the Valencia WRP, together, which form the Santa Clarita Valley Joint Sewage System. According to the LACSD, these WRPs currently treat 19.6 million gallons per day (mgd) of wastewater; however, these facilities have the combined capacity to treat 28.1 mgd of wastewater at the primary, secondary, and tertiary level.

Solid Waste Disposal Services

Burrtec Waste Industries provides solid waste disposal services to the project site and to the City. [Services provided by Burrtec Water Industries range from waste collection and disposal, recycling, and organics collection, and providing disposal options for e-waste (electronic equipment), household hazardous waste and home generated sharps (e.g., needles, syringes, and lancets). There are two landfills in proximity to the project site, including Sunshine Canyon Landfill, located approximately 4.2 miles southeast of the project site, and the Chiquita Canyon Sanitary Landfill, located in Castaic, approximately 6.4 miles northwest of the project site that could be used for disposal of collected solid waste from the project site. The Sunshine Canyon Landfill has a remaining capacity of 77,900,000 cubic yards, as of 2018), with an estimated closure date of 2037 (CalRecycle 2022a). The Chiquita Canyon Sanitary Landfill has remaining capacity of 60,408,000 cubic yards, as shown in Table 4.18-2.

Table 4.18-2. Existing Landfills

Landfill Name	Maximum Permitted Throughput (Tons/Day)	Remaining Capacity (cy)
Sunshine Canyon Landfill	12,100	77,900,000
Chiquita Canyon Landfill	12,000	60,408,000
Total	24,100	138,318,000

Source: CalRecycle 2022a and 2022b.

Notes: cy = cubic yards.

Stormwater Drainage

The project site is largely undeveloped with no existing storm drainage improvements onsite. Stormwater runoff at the site drains toward the northeast where it reaches the main drainage channel along the east boundary of the site (Appendix I). An existing 54-inch storm drainpipe, owned by Los Angeles County, receives flow from the site at the northeast corner and feeds into an underground box culvert that runs north below Wiley Canyon Road (Appendix I). Upstream of the culvert, is a natural section of the creek that runs parallel to Wiley Canyon Road and extends up to a second box culvert located beneath Interstate 5.

Along the westerly edge of the project site, and within the CalTrans right-of-way, there is a smaller open box channel that runs north, parallel to the freeway. This channel ends at the northwest half of the project site where runoff then sheet flows west across the project site and towards the 54-inch outlet pipe mentioned above. This smaller channel is fed by an existing 48-inch storm drainpipe which conveys flows from areas offsite, west of Interstate 5 (Appendix X).

Utilities

Electrical Power

Southern California Edison provides electricity to the City. According to Southern California Edison's DERIM mapping system, existing electricity infrastructure includes 16-kilovolt sub-transmission lines that run along Lyons Avenue directly north of the project site. Electricity is transported to the project area via overhead transmission lines in Wiley Canyon Road at the north and south ends of the project site (SCE 2022).

Natural Gas

The Southern California Gas Company provides the City with natural gas service. Southern California Gas Company's service territory encompasses approximately 20,000 square miles and more than 500 communities. The nearest natural gas transmission lines to the project site include an underground transmission line that cuts across the Vista Valencia Golf Course, which lies approximately one mile north of the project site, and an underground high-pressure distribution line, which lies in Lyons Avenue approximately 1.1 miles northeast of the project site (SoCalGas 2022).

Telecommunications

AT&T is the primary telecommunications provider for the City, and existing cable TV lines are located within the mobile home development just north of the project site.

Weight of solid waste varies, but 0.4 tons of household trash is equal to one cubic yard.

4.18.2 Regulatory Framework

Federal

Federal Clean Water Act

The Clean Water Act (CWA) is the primary federal law that protects our nation's waters, including lakes, rivers, aquifers, and coastal areas. As defined by the U.S. Environmental Protection Agency (EPA), the CWA is the primary law regulating pollution of the nation's waterways and is intended to govern the restoration and maintenance of the chemical, physical, and biological integrity of the nation's water.

Section 303 of the CWA requires states to identify where existing pollution control technologies alone cannot meet water quality standards. Every two years, states are required to submit a list of impaired water bodies to the EPA, where they are prioritized based on (1) the severity of the pollution and (2) the designated use of the water.

Section 401 of the CWA requires that an applicant seeking a federal permit to conduct any activity, including the construction or operation of a facility that may result in the discharge of any pollutants, obtain certification from the state. The Section 401 certification requirement verifies compliance with existing water quality requirements or waives the certification requirement.

Section 402 of the CWA implements the National Pollution Discharge Elimination System (NPDES).

Section 404 of the CWA established a permit program to regulate the discharge of dredged materials or fill into waters of the United States, including wetlands. Common activities regulated by Section 404 include water resource projects (e.g., dams/levees), infrastructure development (e.g., road and airports), and mining activities.

National Pollution Discharge Elimination System

The NPDES is legislated by Section 402 of the CWA and regulated by the EPA. The permitting program prohibits the unauthorized discharge of pollutants from a point source (e.g., pipe, ditch, well) to United States waters. The permitting program addresses municipal, commercial, and industrial wastewater discharges and discharges from large animal feeding operations. Under Section 402 of the CWA, permittees must verify compliance with permit requirements by monitoring their effluent, maintaining records, and filing periodic reports. The program is administered at the local level by the Regional Water Quality Control Boards (RWQCBs). Under the NPDES program, the State Water Resources Control Board (SWRCB) implements Waste Discharge Requirements for some discharges in addition to those subject to NPDES permits. Permits contain specific requirements that limit the pollutants in discharges. They also require dischargers to monitor their wastewater to ensure that it meets all requirements. Wastewater dischargers must maintain their treatment facilities, and treatment plant operators must be certified. The SWRCB routinely inspects treatment facilities and strictly enforce permit requirements.

State

Urban Water Management Planning Act

In 1983, the California legislature enacted the Urban Water Management Planning Act (California Water Code, Sections 10610–10656), which requires specified urban water suppliers within the state to prepare a UWMP and update it every 5 years. State and local agencies and the public frequently use UWMPs to determine if water supply planning has been

efficiently implemented. As such, UWMPs serve as an important element in documenting water supply availability and reliability for purposes of compliance with Senate Bill (SB) 610 and SB 221, which link water supply sufficiency to large land use development project approvals. Urban water suppliers also must prepare UWMPs, pursuant to the Urban Water Management Planning Act, in order to be eligible for state funding and drought assistance.

A UWMP provides information on water usage, water supply sources, and water reliability planning within a specified water agency service area. It also may provide implementation schedules to meet projected demands over the planning horizon a description of opportunities for new development of desalinated water, groundwater information (where groundwater is identified as an existing or planned water source), a description of water quality over the planning horizon, and identification of water management tools that maximize local resources and minimize imported water supplies. Additionally, a UWMP evaluates the reliability of water supplies within the specified service area. This includes a water supply reliability assessment, water shortage contingency plan, and development of a plan in case of an interruption of water supplies.

Senate Bill 221

SB 221, enacted in 2001 and codified in the Water Code, requires a city, county, or local agency to include a condition to any tentative map that a sufficient, water supply is available to serve the subdivision. The term "sufficient water supply" is defined as the total water supplies available during normal, single-dry, and multiple-dry years within a 20-year projection that would meet the proposed subdivision project's projected water demand, in addition to existing and planned future water uses, including agricultural and industrial uses, within the specified service area. SB 221 further requires any verification of "projected" water supplies to be based on entitlement contracts, capital outlay programs and regulatory permits and approvals.

Senate Bill 7

SB 7 (SB X7-7) requires all water suppliers to increase water use efficiency. The legislation sets an overall goal of reducing per capita urban water use by 20% by December 31, 2020 (California Water Code Section 10608.20). In order to reach this goal, SB X7-7 requires each urban retail water supplier to report progress in meeting water use targets (Water Code Section 10608.40). The law also requires wholesale water suppliers to support their retail member agencies' efforts to comply with SB X7-7 through a combination of regionally and locally administered active and passive water conservation measures, programs, and policies, as well as the use of recycled water.

California Water Code

California's Porter-Cologne Water Quality Control Act (1969), which became Division 7 (Water Quality) of the California Water Code, establishes the responsibilities and authorities of the nine RWQCBs and the SWRCB. Among other things, it directs each regional board to formulate and adopt a water quality control plan—known as a basin plan—for all areas within the region. The water quality objectives used for this study are primarily those set forth in the Basin Plan for the Coastal Watersheds of Los Angeles and Ventura Counties, adopted by the RWQCB. The basin plan defines existing and potential beneficial uses and water quality objectives for coastal waters, groundwater, surface waters, imported surface waters, and reclaimed waters in the basin (RWQCB 2019).

California Green Building Standards Code

The California Code of Regulations, Title 24 established the California Green Building Standards Code (CALGreen), which legislates the nation's first mandatory green/sustainable building code in an effort to meet the greenhouse

gas reduction goals of Assembly Bill (AB) 32. CALGreen establishes mandatory measures through which a development can reduce their energy consumption. Such measures for non-residential projects include, but are not limited to, (1) the provision of bicycle facilities (e.g., lockers and parking); (2) the provision of a proportionate number of clean air vehicle parking spaces; and (3) the utilization of water-efficient plumbing fixtures etc. Title 24 of the California Code of Regulations also sets minimum standards for solid waste handling and disposal, including waste tire storage and disposal, hazardous waste disposal facilities, construction and demolition (C&D) and inert debris transfer/processing, C&D waste and inert debris disposal.

Model Water Efficient Landscape Ordinance

23 California Code of Regulations Section 490, et seq., regulates the conservation of California's limited water supply through the establishment of water efficient landscaping regulations. The purpose of these regulations is to promote the values and benefits of landscaping practices that go beyond the conservation and efficient use of water while incentivizing local government agencies to establish and enforce provisions for water management practices and water waste prevention for existing landscapes. The City's landscape regulations is incorporated by reference into SCMC section 17.51.030, Landscaping and Irrigation Standards.

California Integrated Waste Management Act

The California Integrated Waste Management Act of 1989 requires all California cities and counties to divert 50% of the waste generated within their boundaries by the year 2000. The act requires each California city and county to prepare, adopt, and submit to CalRecycle a Source Reduction and Recycling Element (SRRE) that demonstrates how the jurisdiction will meet the California Integrated Waste Management Act's mandated diversion goals. Each jurisdiction's SRRE must include specific components, as defined in Public Resources Code sections 41003 and 41303. In addition, the SRRE must include a program for the management of solid waste generated in the jurisdiction consistent with the following hierarchy: (1) source reduction, (2) recycling and composting, and (3) environmentally safe transformation, and (4) land disposal.

Assembly Bill 341

AB 341 (2012) established a statewide goal to divert 75% of solid waste from landfills by 2020. Part of the City's compliance with the requirements of AB 341 includes the establishment of recycling regulations. SCMC section 15.44.220 requires that person(s) in charge of day-to-day operations at a residence/building/facility arrange for the collection of their recyclable solid waste materials through services franchised by the City.

Assembly Bill 1826

AB 1826 (2014) requires businesses to recycle their organic waste on and after April 1, 2016, depending on the amount of waste they generate on a weekly basis. Additionally, AB 1826 requires that, after January 1, 2016, all local jurisdictions implement an organic waste recycling program to divert organic waste generated by businesses, including multifamily residential dwellings with five or more units. Organic waste includes food waste, green waste, landscape and pruning waste, nonhazardous wood waste, and food-soiled paper waste that is mixed in with food waste. This law phases in the mandatory recycling of commercial organics over time.

California Water Action Plan

California Water Action Plan: Actions for Reliability, Restoration, and Resilience was released by Governor Brown in January 2014. A collaborative effort of the California Natural Resources Agency, the California EPA, and California Department of Food and Agriculture, the California Water Action Plan (California Natural Resources Agency 2016) was developed to meet three broad objectives: more reliable water supplies; the restoration of important species and habitat; and a more resilient, sustainably managed water resources system (water supply, water quality, flood protection, and environment) that can better withstand inevitable and unforeseen pressures in the coming decades.

Over the next five years, the following actions are designed to move California toward more sustainable water management:

- Make conservation a California way of life
- Increase regional self-reliance and integrated water management across all levels of government
- Achieve the co-equal goals for the Delta
- Protect and restore important ecosystems
- Manage and prepare for dry periods
- Expand water storage capacity and improve groundwater management
- Provide safe water for all communities
- Increase flood protection
- Increase operational and regulatory efficiency
- Identify sustainable and integrated financing opportunities

Local

Santa Clarita Municipal Code

Section 17.51.030, Landscaping and Irrigation Standards

SCMC section 17.51.030 regulates local landscaping design and requirements, including (1) the efficient use of water through appropriate low-water-using plant materials, water conserving irrigation, and regular maintenance of landscaped areas; (2) the conservation of potable water by maximizing the use of recycled water and other water conserving technology for appropriate applications; and (3) the incorporation, by reference, of the Model Water Efficient Landscape Ordinance (MWELO).

Section 15.44.320, Solid Waste Collector Requirements

SCMC section 15.44.320 regulates solid waste service providers handle, transport, and dispose of solid waste. SCMC Section 15.44.320 also requires that solid waste service providers divert or cause to be diverted the maximum feasible amount of recyclable solid wastes from landfills, including construction material.

Section 15.46.300, Construction and Demolition Materials Management Plans

SCMC section 15.46.300 establishes the legislation through which developers must submit Construction and Demolition Materials Management Plans (C&DMMPs) outlining the following:

- The estimated weight of the project's C&D materials generated
- The maximum weight of C&D materials that it is feasible to divert
- The vendor facility that the applicant proposes to use to collect, divert, market, reuse, or receive the C&D materials
- The estimated weight of residual C&D materials that would be transported for disposal in a landfill or transformation facility
- The estimated weight of inert waste to be removed from the waste stream and not disposed of in a solid waste landfill

City of Santa Clarita General Plan Conservation and Open Space Element

The City's General Plan Conservation and Open Space Element outlines goals and policies pertaining to the efficient use of the City's resources, specifically water and energy. These goals and policies are analyzed in Section 4.10, Land Use and Planning, of this document.

4.18.3 Thresholds of Significance

The significance criteria used to evaluate the project impacts to utilities and service systems are based on Appendix G of the CEQA Guidelines. According to Appendix G of the CEQA Guidelines, a significant impact related to utilities and service systems would occur if the project would:

- Require or result in the relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects.
- 2. Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years.
- 3. Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments.
- 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.
- 5. Comply with federal, state, and local management and reduction statutes and regulations related to solid waste.

4.18.4 Impact Analysis

Threshold UTL-1: Would the project require or result in the relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?

Water Supply Infrastructure

The water distribution system for the proposed project would tie into an existing 12-inch diameter water line located in Wiley Canyon Road that extends out along Old Wiley Canyon Road. The local distribution system mains within the project area would connect to this existing line near the north end of the project site in two separate connections. The proposed project would require the construction of the entire on-site water distribution system as well as the connection of the new facilities to the existing domestic water and fire flow system. The construction of new water utility infrastructure is included under the proposed project and, as such, is analyzed throughout this document as part of potential construction impact analysis; no unique impacts would occur as a result of construction of the onsite water infrastructure and the impacts would be **less than significant**, and no mitigation is required.

Wastewater Treatment

The proposed project would construct all new sewer pipelines throughout the project site that would then exit the site at the northeast corner to a newly proposed 10-inch sewer line in Wiley Canyon Road. This new line would then drain to the existing sewer main in Wabuska Street. The wastewater flow would then be conveyed to either of both of Los Angeles County Sanitation District's Valencia Trunk Sewer, located in Orchard Village Road southeast of Wiley Canyon Road, or District No. 32 Main Trunk Sewer, located in a private right-of-way southeast of the intersection of Orchard Village Road and Wiley Canyon Road (LACSD 2022a). The District's 24-inch diameter Valencia Trunk Sewer has a capacity of 5.3 million gallons per day (mgd) and conveyed a peak flow of 1.9 mgd when last measured in 2018. The District's 18-inch diameter District No. 32 Main Trunk Sewer has a capacity of 3.3 mgd and conveyed a peak flow of 0.2 when last measured in 2018 (LACSD 2022a). The expected average wastewater flow from the project would be 0.480 cubic feet per second or 0.31 mgd (Appendix M). According to a Sewer Area Study prepared for the proposed project, wastewater flows from the project would enter the existing 10-15-inch diameter sewer lines (identified as PC7599), 12-18-inch sewer lines (PC 7549) and then to the existing 24-inch LA County Sanitary District trunk sewer line (diversion structure) (Appendix M). The pipe sizing was determined to be adequate to meet the City of Santa Clarita standards for a maximum of 50% full for the existing 10 to 12-inch downstream pipe segments and meet standards for a maximum of 75% full for the existing 15 to 18-inch downstream pipe segments (Appendix M). Therefore, there would be adequate capacity in the existing sewer lines to accommodate the additional wastewater generated by the proposed project (Appendix M). The wastewater from the project site would be treated at the Saugus and Valencia WRPs which are interconnected, forming the Santa Clarita Valley Joint Sewerage System (SCVJSS). According to the LACSD, collectively these WRPs currently treat 18.2 million gallons per day (mgd) of wastewater; however, these facilities have the combined capacity to treat 28.1 mgd of wastewater at the primary, secondary, and tertiary level (LACSD 2022 and Appendix L). As such, the LACSD has ample remaining capacity between the two existing WRPs to treat additional flows of wastewater, and no new wastewater treatment facilities would be required or are included as part of the project. Impacts associated with wastewater treatment would be less than significant, and no mitigation is required.

Stormwater Drainage Facilities

As also described in Section 4.9, Hydrology and Water Quality, the proposed project would require new storm drainage facilities throughout the project site. The proposed drainage system would feature 3 detention basins with low flow overflows to the South Fork of the Santa Clara River. Runoff from the proposed project would continue to be directed to the northeast of the site and discharge into the existing 54-inch diameter outlet pipe (Appendix I). The drainage system would also include onsite catch basins, grated inlets, and area drains.

The detention basins would serve for both water quality and water quantity control purposes and would be constructed as part of the project in order to adhere to stormwater drainage control requirements. On-site drainage improvements would be designed to accommodate on-site stormwater flow, such that on-site flooding would not occur in accordance with local requirements. The construction of these proposed detention basins and associated storm drain lines throughout the project site are included under the proposed project, and as such, the environmental impacts associated with new and expanded stormwater drainage facilities are analyzed throughout this document; no other unique impacts would occur. Therefore, the potential impact related to the new construction of drainage facilities is **less than significant**, and no mitigation is required.

Electric Power, Natural Gas, and Telecommunication Facilities

The project site is within the service areas of Southern California Edison for electricity, Southern California Gas Company for natural gas, and AT&T and Charter for telecommunications. Extensions of existing infrastructure into the project site would be obtained from existing lines and connections within the area. Upgrades would be confined to on-site connections and would likely be completed by either trenchless technology or completion of open trenching, to the depth of the existing underground infrastructure. The extension of off-site infrastructure onto the project site would not require any construction activities that are not already addressed throughout this EIR. As a result of complying with current regulations, impacts associated with new water infrastructure would be **less than significant**, and no mitigation is required.

Threshold UTL-2: Would the project have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?

A Water Supply Assessment (WSA) pursuant to the Senate Bill 610 (Water Code Sections 10910, et seq.,) was completed for the proposed project and is provided in Appendix L. The water demand for the proposed project was estimated at 117 acre-feet per year (AFY) in a normal/average year, 124 AFY for a single dry year, and 119 AFY for multiple dry years, consistent with the 2020 UWMP (Appendix L). According to the WSA, the project's water demand was accounted for in the 2020 UWMP for Santa Clarita Valley Water because it was included as part of "planned future uses" which was used to determine water supply demands in future projections for the UWMP update (Appendix L). The projected water supplies and demands over 5-year increments are provided in Tables 4.18-3 through 4.18-5, below.

Normal Years

As indicated in Table 4.18-3, projected water demands would be met by projected water supplies for the normal/average water year out to 2045. By 2050, however, projected supplies would not be able to meet projected demands with just passive conservation measures in place. At that interval, active conservation measures, consistent with local conservation programs, would be required to get the projected demand below the projected supplies.

Table 4.18-3. Water Supply and Demand During Normal Year

Year	2025	2030	2035	2040	2045	2050
Existing Supplies	88,150	78,150	77,927	76,967	76,967	76,967
Planned Supplies	15,199	26,356	31,371	32,778	33,779	34,791
Total Supplies	103,349	104,506	109,298	109,745	110,746	111,758
Demands with passive conservation ¹	82,100	89,300	97,600	104,300	109,600	115,100
Demands with passive and active conservation	76,400	81,700	88,700	93,600	97,500	101,000

Source: Data from WSA in Appendix L.

Notes: af = acre-feet; af/y = acre-feet per year.

Single Dry Year

Both demand and supplies would change during a single dry year as shown in Table 4.18-4. Projected demands with just passive conservation measures would not be able to meet projected supplies in 2025 and 2050. At those intervals, active conservation measures, consistent with local conservation programs, would be required to get the projected demand below the projected supplies.

Table 4.18-4. Water Supply and Demand During Single Dry Year

Year	2025	2030	2035	2040	2045	2050
Existing Supplies	63,540	60,100	65,917	65,917	65,917	65,917
Planned Supplies	19,969	46,636	51,511	52,918	53,919	54,931
Total Supplies	83,419	106,736	117,428	118,835	119,836	120,848
Demands with passive conservation	87,000	94,700	103,500	110,600	116,200	122,000
Demands with passive and active conservation	81,000	86,600	94,000	99,200	103,400	107,100

Source: Data from WSA in Appendix L.

Notes: af = acre-feet; af/y = acre-feet per year.

Multiple Dry Years

As shown in Table 4.18-5, projected water supplies during multiple dry years would be able to meet projected demands, which include the proposed project, out until 2050.

Table 4.18-5. Water Supply and Demand During Multiple Dry Years

Year	2025	2030	2035	2040	2045	2050
Existing Supplies	81,800	80,100	82,694	85,067	84,996	81,806
Planned Supplies	19,503	33,933	42,865	45,018	46,019	46,909
Total Supplies	101,303	114,033	125,559	130,085	131,015	128,715
Demands with passive conservation	83,570	91,380	99,670	106,660	112,100	117,010

For completeness, LAWWD36 sales are included in demands and supplies. Breakdown of LACWWD 36 and SCV Water Demands are shown in Table 2-10 of Appendix L. Demand projections include modeling plumbing code changes and assume water conservation programs will continue to be implemented as necessary.

Table 4.18-5. Water Supply and Demand During Multiple Dry Years

Year	2025	2030	2035	2040	2045	2050
Demands with passive and active conservation	77,830	83,620	90,570	95,780	99,670	102,870

Source: Data from WSA in Appendix L.

Notes: af = acre-feet; af/y = acre-feet per year.

Therefore, based on the total projected water supplies available to the SCV Water service area over the 30-year projection, there would be sufficient water supplies during normal, single-dry, and multiple-dry year (5-year drought) periods. This assessment includes the projected demands of the proposed project, in addition to existing and other planned future uses, including agricultural and industrial uses, throughout the Santa Clarita Valley, provided that SCV Water continues to utilize available SWP amounts that were assumed in the 2020 UWMP, and continues to incorporate conjunctive use (coordinated use of surface water and groundwater), water conservation, water transfers, recycled water, and water banking as part of the total water supply portfolio and management approach to long-term water supply planning and strategy (Appendix L). As a result, the potential impacts of the proposed project related to sufficient availability of water supplies would be **less than significant**, and no mitigation is required.

Threshold UTL-3. Would the project result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?

Wastewater from the project site is treated at the Saugus and Valencia WRPs. According to the LACSD, these WRPs currently treat 18.2 mgd of wastewater and have a combined capacity to treat 28.1 mgd of wastewater at the primary, secondary, and tertiary level (LACSD 2022 and Appendix L). According to a Sewer Area Study prepared for the proposed project, wastewater flows from the project would total 0.480 cubic feet per second or 0.31 mgd (Appendix M). LACSD has remaining capacity between the two WRPs to treat an additional 8.5 mgd of wastewater. As such, the WRPs have adequate capacity to serve the proposed project in addition to existing commitments. Impacts would be **less than significant**, and no mitigation is required.

Threshold UTL-4. Would the project generate solid waste in excess of state or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?

Construction

Construction of the project would generate common construction waste materials (e.g., concrete rubble, asphalt rubble, wood, drywall) that would result in an increased demand for solid waste collection and disposal capacity. The SCMC section 15.46.300, requires completion and submittal of a construction and demolition materials management plan (C&DMMP) to the City for approval before it issues building permits for the site. The C&DMMP will identify the type of project and estimate the weight of materials to be recycled during construction, as well as indicate the vendor or facility that has been commissioned to collect, divert, reuse, or receive the construction and demolition materials. With compliance with City requirements, impacts would be less than significant, and no mitigation is required.

Operations

Once operational, the project would generate solid waste associated with the proposed land uses on the site. Waste would include paper, cardboard, food, bio/hazardous wastes, and green waste. Table 4.18-6 lists the anticipated

solid waste quantities generated at the site through operation of the proposed project. Estimated solid waste generations for the proposed project were calculated using the solid waste generation rates provided by CalRecycle. These generation rates assume approximately 8 pounds per unit per day for the senior facility, 5 pounds per 1,000 square-foot per day (lbs/1,000 sf/day) for commercial land uses, and 10 pounds per dwelling unit per day for the multi-family residences (CalRecycle 2022c).

Table 4.18-6. Solid Waste Generation Estimates

Proposed Land Use	Number/Size	Generation Factor1	Estimated Waste (lbs/day)
Senior Facility	217 units	8 lbs/unit/day	1,604
Commercial	8,914 square feet	5 lbs/1,000 sf/day	44.6
Multi-Family Residences	379 units	10 lbs/dwelling unit/day	3,790
	_	_	_
		Total	5,438.6

Source: CalRecycle 2022c.

Notes: lbs/day = pounds per day; lbs/room/day; = pounds per room per day; lbs/sf/day = pounds per square feet per day; NA = not applicable; — = no data available.

- The units in the Senior Facility were considered to be equivalent to the lower end range of single-family dwelling units.
- ² "Other" Service category land use estimate used.

As shown in Table 4.18-6, at full buildout the proposed project would generate approximately 5,439 pounds of solid waste per day (2.72 tons per day), and approximately 993 tons per year. As stated in Section 4.18.1, to the closest landfill to the project site is the Sunshine Canyon Landfill, which has a remaining capacity of 77,900,000 cubic yards. Based on the daily permitted capacity at the landfill (12,100 tons/day), buildout of the proposed project would contribute 2.72 tons per day, which represents approximately 0.022% of daily permitted capacity.¹ On an annual basis, the proposed project would contribute 993 tons per year or approximately 2,648 cubic yards², which represents a minimal contribution to the remaining capacity of 77,900,000 cubic yards.

In the unlikely event that the Sunshine Canyon Landfill closes or reaches capacity prior to full buildout of the project, the Chiquita Canyon Landfill has a remaining capacity of 8,617,126 cubic yards and would have adequate capacity to accommodate the proposed project.

All non-hazardous solid waste generated from the project site (e.g., plastic and glass bottles and jars, paper, newspaper, metal containers, cardboard) would be recycled per local and state regulations previously mentioned, with a goal of 75%, in compliance with the Integrated Waste Management Act. Remaining non-hazardous solid waste would be disposed of at one of the nearby landfills (hazardous waste is managed and disposed of in compliance with all applicable federal, state, and local laws and is discussed in greater detail in Section 4.8, Hazards and Hazardous Materials, of this EIR). The City will review building plans and ensure that proper space is set aside to allow for the collection and storage of recyclable materials prior to issuance of building permits to ensure that there is adequate space for recycling on the project site. Overall, impacts associated would be **less than significant**, and no mitigation is required.

¹ 2.72/12100 * 100 = 0.022%

One cubic yard of compacted municipal solid waste weighs between 500-1,000 pounds, so 750 pounds on average.

Threshold UTL-5. Would the project comply with federal, state, and local management and reduction statutes and regulations related to solid waste?

Although the increase in solid waste generated would be minimal compared to the daily permitted capacity at Sunshine Canyon or Chiquita Landfill, buildout of the proposed project would contribute to the volume of solid waste generated in the City that is diverted to existing landfills. The proposed project would contribute to the acceleration of landfill closures. However, compliance with City, county, and state waste reduction programs and policies would reduce the amount of solid waste being transferred to the landfills. The proposed project would be required to comply with applicable state and local regulations associated with the reduction of solid waste entering landfills, including the California Integrated Waste Management Act, as well as the City's plans, policies, and programs related to the recycling/diversion and the disposal of solid waste.

As previously noted, during construction, all wastes would be recycled to the maximum extent possible, in accordance with the City's requirements. Additionally, the project shall prepare a C&DMMP, which will identify the type of project and estimate the weight of materials to be recycled during construction, as well as indicate the vendor or facility that has been commissioned to collect, divert, reuse or receive the construction and demolition materials.

All non-hazardous solid waste generated from the project site once operational (e.g., plastic and glass bottles and jars, paper, newspaper, metal containers, and cardboard) would be recycled, with a goal of 75%, in compliance with the Integrated Waste Management Act. Thus, the project would comply with state and local statutes and regulations related to solid waste during construction and operation. Impacts would be **less than significant**, and no mitigation is required.

4.18.5 Mitigation Measures

Impacts would be less than significant, and no mitigation measures are required.

4.18.6 Level of Significance After Mitigation

Impacts would be less than significant, and no mitigation measures are required.

4.18.7 Cumulative Effects

As discussed above, adequate capacity exists to provide water, wastewater, solid waste, electricity, natural gas, and telecommunications services to the proposed project. A cumulative utilities and service systems impact would occur if the proposed project, in combination with the four identified related projects included in Table 3-4, would result in the need to provide new or expanded utilities services. Given that adequate facilities exist to serve the proposed project and that each identified related project would be subject to ensuring adequate services can be provided, the project's contribution to cumulative utilities and service impacts would be less than significant, and cumulative impacts would be less than significant.

4.18.8 References Cited

- California Natural Resources Agency. 2016. California Water Action Plan. Accessed, December 2, 2022. http://resources.ca.gov/docs/california_water_action_plan/Final_California_Water_Action_Plan.pdf.
- CalRecycle. 2022a. SWIS Facility Detail. Sunshine Canyon Landfill, Accessed, November 22, 2022. https://www2.calrecycle.ca.gov/SolidWaste/SiteActivity/Details/259?siteID=4702.
- CalRecycle. 2022b. SWIS Facility Detail. Chiquita Canyon Landfill, Accessed, November 22, 2022. https://www2.calrecycle.ca.gov/SolidWaste/SiteActivity/Details/3574?siteID=1037.
- CalRecycle. 2022c. Estimated Solid Waste Generation Rates. Accessed, November 23, 2022. https://www2.calrecycle.ca.gov/WasteCharacterization/General/Rates.
- LADPW (Los Angeles County Department of Public Works). 2016. Consolidated S.M.D Map. Accessed, November 22, 2022. https://pw.lacounty.gov/smd/smd/maps/1298m.pdf, revised February 3, 2016.
- Los Angeles County Sanitation District (LACSD). 2022b. Final 2015 Santa Clarita Valley Joint Sewerage System Plan. https://www.lacsd.org/home/showpublisheddocument/1830/637641937131270000, accessed November 23, 2022.
- LACSD. 2022a. Will Serve Letter for the Wiley Canyon Project, May 2, 2022.
- RWQCB (Regional Water Quality Control Board). 2019. Basin Plan for the Coastal Watersheds of Los Angeles and Ventura Counties. https://www.waterboards.ca.gov/losangeles/water_issues/programs/basin_plan/basin_plan_documentation.html.
- SCE (Southern California Edison). 2022. DeRiM Web Map. Accessed, November 22, 2022. https://drpep.sce.com/drpep/.
- SoCalGas (Southern California Gas Company). 2022. Gas Transmission Pipeline Interactive Map. Accessed, November 22, 2022. https://socalgas.maps.arcgis.com/apps/webappviewer/index.html?id=c85ced1227af4c8aae9b19d677969335.
- SCV Water (Santa Clarita Valley Water Agency). 2021. 2020 Urban Water Management Plan. Accessed December 2, 2022. https://yourscvwater.com/wp-content/uploads/2021/06/SCVWA-2020-UWMP-Volume-I_FINAL.pdf.

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4.19 Wildfire

This section describes the existing setting of the proposed Wiley Canyon Project (project) site, identifies associated regulatory requirements, evaluates potential impacts, and identifies mitigation measures related to implementation of the proposed project. Potential wildfire impacts resulting from construction and operation of the proposed project were evaluated based on a review of existing resources and applicable laws, regulations, guidelines, and standards. Publicly available sources were reviewed in the development of this section, including, but not limited to, the CAL FIRE FRAP database, City of Santa Clarita General Plan (City of Santa Clarita 2011), the Santa Clarita Municipal Code ("SCMC"), County of Los Angeles Fuel Modification Standards (as adopted by the SCMC), and the City of Santa Clarita Hazard Mitigation Plan. Additionally, a Wildfire Evacuation Plan (WEP) was prepared for the project and has been included as Appendix N. This section focuses on the effect of the proposed project on wildfire risk. Fire protection services for the proposed project are addressed in Section 4.13, Public Services.

4.19.1 Existing Conditions

Regional

Wildfire is a continuous threat in Southern California and is particularly concerning in the wildland urban interface (WUI), a geographic area where urban development either abuts or intermingles with wildland or vegetative fuels. The City of Santa Clarita (City) within the County of Los Angeles (County) contains several miles of WUI, where established development meets open space areas and canyons within urban and suburban areas. The region's climate, severe dry periods, vegetative fuel composition, and steep and varied terrain make the region susceptible to both wildland and WUI fires. Along the hills surrounding Santa Clarita, ruderal grasslands give way to coastal scrub, then chaparral, and ultimately oak and evergreen woodlands. All of these plant communities are capable of carrying fast-moving fire, especially when fine fuels are cured during seasonal droughts. Adaptations to the local dry, Mediterranean climate include specialized roots, stems, and leaves. The latter two become available fuels of importance and contribute to wildfire intensity and spread.

Weather throughout Southern California is influenced by the Pacific Ocean and is frequently under the influence of a seasonal, migratory subtropical high pressure cell known as the "Pacific High." Wet winters and dry summers with mild seasonal changes characterize the Southern California climate. This climate pattern is occasionally interrupted by extreme periods of hot weather, winter storms, or dry, easterly Santa Ana winds. Santa Ana winds bring hot, dry desert air from the east into the region during late summer and fall, which increases wildland fire hazards during these seasons. Dry vegetation, low humidity, and high air temperature can combine to produce large-scale fire events. As Santa Ana winds blow westward toward denser development, fires driven by these winds have the potential to result in a greater risk to property and life.

Project Site

The project site consists of approximately 31.8 acres of vacant land located at 24924 Hawkbryn Avenue, bordered by Interstate 5 (I-5) to the west, Wiley Canyon Road to the east, Hawkbryn Avenue to the north and Calgrove Boulevard to the south, within the Newhall area of the City of Santa Clarita. The project site is currently vacant with the exception of two single-story metal buildings, two mobile homes, former mule barns, and one drained, man-made water basin associated with the former Smiser Mule Ranch which historically occupied the site. The northeastern portion of the project site, east of Wiley Canyon Road, consists of vacant land on an elevated hillside.

This portion of the site is improved with an existing retaining wall and dirt roadways which provide access for an existing easement. Ruderal vegetation, grass, brush, and trees cover the majority of the project site.

Vegetation/Fuels

Variations in vegetative cover type and species composition have a direct effect on fire behavior. Some plant communities and their associated plant species have increased flammability based on plant physiology (resin content), biological function (flowering, retention of dead plant material), physical structure (bark thickness, leaf size, branching patterns), and overall fuel loading. For example, non-native grass dominated plant communities become seasonally prone to ignition and produce lower intensity, higher spread rate fires. In comparison, California sagebrush scrub can produce higher heat intensity and higher flame lengths under strong, dry wind patterns, but does not typically ignite or spread as quickly as light, flashy grass fuels.

It is important to consider the dynamic nature of vegetation communities. Fire presence and absence at varying cycles or regimes affects plant community succession. Succession of plant communities, most notably the gradual conversion of shrublands to grasslands with high-frequency fires and grasslands to shrublands with fire exclusion, is highly dependent on the fire regime. Further, biomass and associated fuel loading will increase over time if disturbance or fuel reduction efforts are not diligently implemented.

As discussed in Section 4.3, Biological Resources, of this EIR and shown in Table 4.19-1, the majority of the site is considered developed with ruderal and non-native grasses, but the largest existing plant communities are big sagebrush and Fremont Cottonwood forest. The distribution of vegetation communities and land cover types on the Project site is shown on Figure 4.3-1 in Section 4.3, Biological Resources.

Table 4.19 1. Existing Vegetation and Land Cover

Common Name		Acres	Percent of Site (%)
California sycamore woodlands		0.12	0.27
Fremont cottonwood forest		1.31	2.89
Fremont cottonwood/mule fat forest		0.48	1.06
Coast live oak/coastal sage scrub		0.13	0.29
Coast live oak-arroyo willow-tree tobacco woodland		0.41	0.91
Chamise chaparral		0.10	0.22
Big Sagebrush		1.57	3.47
Mulefat thickets		0.70	1.55
California buckwheat scrub		0.48	1.06
Arroyo willow thickets		0.29	0.64
Developed		16.20	35.79
Non-native Woodland		0.83	1.83
Ruderal		22.65	50.03
	Total	45.27	100.0

Climate

The average high temperature for the Project area varies between approximately 63°F in December and 94°F in August. Precipitation typically occurs between December and March with an average annual rainfall of approximately 13 inches (Weather Spark 2024).

The project site, like much of Southern California, is influenced by prevailing wind patterns. Prevailing winds are winds that blow from a single direction over a specific area of the Earth. The prevailing wind pattern is from the west (on-shore), but the presence of the Pacific Ocean causes a diurnal wind pattern known as the land/sea breeze system. During the day, winds are from the west-southwest (sea) and at night winds are from the northeast (land). During the summer season, the diurnal winds may average slightly higher than the winds during the winter season due to greater pressure gradient forces. Surface winds can also be influenced locally by topography and slope variations. The highest wind velocities are associated with downslope, canyon, and Santa Ana winds. The Project site does not include topography that would create unusual weather conditions. However, the open space to the west and east has variable topography that could enhance wind speeds and increase fire behavior.

Typically, the highest fire danger is produced by the high-pressure systems that occur in the Great Basin, which result in the Santa Ana winds of Southern California. Sustained wind speeds recorded during recent major fires in Southern California exceeded 30 mph and may exceed 50 mph during extreme conditions, as was the case during the most recent wildfires (Thompson & Livescience 2017). The Santa Ana wind conditions are a reversal of the prevailing southwesterly winds that usually occur on a region-wide basis during late summer and early fall. Santa Ana winds are warm winds that flow from the higher desert elevations in the north through the mountain passes and canyons. As they converge through the canyons, their velocities increase. Consequently, peak velocities are highest at the mouths of canyons and dissipate as they spread across valley floors. Santa Ana winds generally coincide with the regional drought period and the period of highest fire danger.

Topography

Topography influences fire risk by affecting fire spread rates. Typically, steep terrain results in faster fire spread upslope and slower fire spread down-slope in the absence of wind. Flat terrain tends to have little effect on fire spread, resulting in fires that are driven by wind. As mentioned in Section 4.9 Hydrology and Water Quality, the site is relatively flat with elevations ranging between 1,300 and 1,325 feet above mean sea level with lower elevations along the eastern border due to the South Fork of the Santa Clara River. The topographical features of the site would have little influence on fire behavior.

Fire Hazard Severity Zone Designation

CAL FIRE's Fire and Resource Assessment Program (FRAP) database includes map data documenting areas of significant fire hazards in the state. These maps categorize geographic areas of the state into different fire hazard severity zones (FHSZs). The classifications include Moderate, High, and Very High FHSZs. CAL FIRE uses FHSZs to classify anticipated fire-related hazards for the entire state, and includes classifications for State Responsibility Areas, Local Responsibility Areas, and Federal Responsibility Areas. Fire hazard severity classifications take into account vegetation, topography, weather, crown fire production, and ember production and movement.

As shown in Figure 4.19-1, Fire Hazard Severity Zone Map, the Project site lies within an area considered a Very High Fire Hazard Severity Zone (VHFHSZ) within the Local Responsibility Area (LRA) as designated by CAL FIRE and the Los Angeles County Fire Department. There is an expansive area of VHFHSZ State Responsibility Area

(SRA) west of the Project on the other side of I-5 (CAL FIRE 2011). The VHFHSZ designation can be attributed to a variety of factors including close proximity to open space, highly flammable fine fuels, seasonal, strong winds, and a Mediterranean climate that results in vegetation drying during the months most likely to experience Santa Ana winds.

Fire History

Fire History data provides valuable information regarding fire spread, fire frequency, ignition sources, and vegetation/fuel mosaics across a given landscape. One important use for this information is as a tool for pre-planning. It is advantageous to know which areas may have burned recently and therefore may provide a tactical defense position, what type of fire burned on the site, and how a fire may spread. The fire history information presented below comes from CAL FIRE's FRAP database. The FRAP database summarizes fire perimeter data for fires over 10 acres in size occurring since the late 1800s. Although this data is incomplete as it is limited to fires over 10 acres, the data provides a summary of recorded fires and can be used to show whether large fires have occurred in the Project area, which provides an indication of whether they may be possible in the future. Fire history recorded for the Project area is shown in Figure 4.19-2 Fire History Map.

According to available data from CAL FIRE in the FRAP database, 125 fires have burned near the Project site since the beginning of the historical fire data record. Recorded wildfires within 5 miles of the Project site range from 10 acres to 115,537 acres (1970 Clampitt Fire) and the average fire size is 3,042 acres. The most recent significant fire to occur was the 2019 Saddle Ridge Fire (8,799 acres) and the largest fire in recent history was the 2003 Simi Fire (107,570 acres). One unnamed fire in 1953 burned onto the Project site, burning 208 acres in total, onto the northeastern portion of the Project (CAL FIRE 2022). Given the amount of development occurring in the area since the last fire has burned onto the project site, it would be expected to have a lower likelihood of occurrence now compared to when it last occurred.

Emergency Response and Fire Protection

Fire protection services are provided to Santa Clarita by the Los Angeles County Fire Department and is under the jurisdiction of Division II and Battalion 6 of the LACFD (City of Santa Clarita n.d.). Therefore, the LACFD would provide initial response to the Project site for fire protection and emergency medical services. LACFD Station 124 and 73 are similar distances to the Project with both just under 3 miles to the Project entrance. This means that one of the two would provide initial response and at least one is likely to be available. The LACFD jurisdictional response area encompasses approximately 2,311 square miles and a population of more than 4 million people across 60 district cities and all unincorporated communities. The LACFD currently operates 179 Fire Stations and consists of a staff of nearly 5,000 total personnel (County of Los Angeles 2022, 2023a).

In addition, the City participates in automatic aid agreements and dropped boundary agreements on first alarm or greater emergency calls with surrounding communities, ensuring that the closest unit will be dispatched, regardless of jurisdictional boundaries. Further, the LACFD has Mutual Aid agreements that allow the jurisdictions to request additional resources from city, county, state, and federal agencies to meet the needs of a given incident. The LACFD is responsible for the preparation, maintenance, and execution of Fire Preparedness and Management Plans. Mutual Aid agreements affecting the LACFD include the Los Angeles County Operational Area Mutual Aid Plan, California Fire Master Mutual Aid Agreement, California Master Cooperative Wildland Fire Management and Stafford Act Response Agreement, California Fire Assistance Agreement, and Public Resources Code 4129 (County of Los Angeles 2023a).

4.19.2 Regulatory Framework

Federal

National Fire Protection Association Codes, Standards, Practices, and Guides

National Fire Protection Association (NFPA) codes, standards, recommended practices, and guides (NFPA 2024) are developed through a consensus standards development process approved by the American National Standards Institute. This process brings together professionals representing varied viewpoints and interests to achieve consensus on fire and other safety issues. NFPA standards are recommended guidelines and nationally accepted good practices in fire protection but are not laws or codes unless adopted as such or referenced as such by the California Fire Code or the local fire agency.

- NFPA 10, Standard for Portable Fire Extinguishers (2018): A long-standing standard, which specifies the types, sizes, rating, and locations for portable fire extinguishers. It also provides information on how to calculate the number and size of portable fire extinguishers needed.
- NFPA 11, Standard for Low-, Medium-, and High-Expansion Foam (2016): NFPA 11 is a longstanding standard, which provides recommendations for design and installation of firefighting foam systems and portable equipment. It also provides recommendations regarding calculating the amount of foam concentrate and solution needed on a flammable or combustible liquid fire.
- NFPA 13, Standard for Installation of Sprinkler Systems (2019): NFPA 13 is the standard for design and installation of automatic fire sprinkler systems in a building. It provides the requirements for the type of system needed in a particular occupancy, water supply, sprinkler head flow and pressures, the locations of sprinkler heads, and installation of the system. This standard is referenced by the California Fire Code.
- NFPA 22, Standard for Water Tanks for Private Fire Protection (2018): Provides recommendations for the design, construction, installation, and maintenance of tanks and accessory equipment that supply water for private fire protection.
- NFPA 30, Flammable and Combustible Liquids Code (2018): This standard provides safeguards to reduce the hazards associated with the storage, use, and handling of flammable and combustible liquids. It provides detailed information regarding tank storage, spacing, dispensing of liquids, portable containers, and other related operations. NFPA 30 is referenced by the California Fire Code.
- NFPA 70, National Electrical Code (2017): NFPA 70 is the standard for the design, installation, and inspection
 of electrical hazards. It includes recommendations for various types of occupancies and also provides
 recommendations and criteria for the location and installation of "explosion proof" electrical systems.
- NFPA 72, National Fire Alarm and Signaling Code (2019): NFPA 72 is the standard for the design, installation, and operation of fire alarm systems in various occupancies. This standard is used by fire alarm system designers when designing and installing a system. It is utilized also by fire agencies when reviewing plans for new systems.
- NFPA 497, Classification of Flammable Liquids, Gases, or Vapors, and of Hazardous Locations for Electrical Installations in Chemical Process Areas (2017): NFPA 497 is the standard, which is utilized along with NFPA 70 to determine flammable gas, flammable liquid, and combustible liquid hazards and to recommend the areas that require explosion-proof electrical systems. It also sets forth the extent of the classified areas. Although the title says chemical process areas, it is used as a standard for explosion-proof electrical as it defines various risks and contains numerous diagrams to help the electrical system designer.

Federal Wildland Fire Management Policy

The Federal Wildland Fire Management Policy was developed in 1995, updated in 2001, and again in 2009 by the National Wildfire Coordinating Group, a federal multi-agency group that establishes consistent and coordinated fire management policy across multiple federal jurisdictions. An important component of the Federal Wildland Fire Management Policy is the acknowledgement of the essential role of fire in maintaining natural ecosystems. The Federal Wildland Fire Management Policy and its implementation are founded on the following guiding principles, found in the Guidance for Implementation of Federal Wildland Fire Management Policy (National Wildfire Coordinating Group 2009):

- Firefighter and public safety is the first priority in every fire management activity.
- The role of wildland fire as an essential ecological process and natural change agent will be incorporated into the planning process.
- Fire management plans, programs, and activities support land and resource management plans and their implementation.
- Sound risk management is a foundation for all fire management activities.
- Fire management programs and activities are economically viable, based upon values to be protected, costs, and land and resource management objectives.
- Fire management plans and activities are based upon the best available science.
- Fire management plans and activities incorporate public health and environmental quality considerations.
- Federal, state, tribal, local, interagency, and international coordination and cooperation are essential.
- Standardization of policies and procedures among federal agencies is an ongoing objective.

National Fire Plan

The National Fire Plan, officially titled Managing the Impacts of Wildfire on Communities and the Environment: A Report to the President In Response to the Wildfires of 2000, was a presidential directive in 2000 as a response to severe wildland fires that had burned throughout the United States. The National Fire Plan focuses on reducing fire impacts on rural communities and providing assurance for sufficient firefighting capacity in the future. The plan addresses five key points: Firefighting, Rehabilitation, Hazardous Fuels Reduction, Community Assistance, and Accountability. The plan continues to provide invaluable technical, financial, and resource guidance and support for wildland fire management across the United States. The U.S. Forest Service and the Department of the Interior are working to successfully implement the key points outlined in the plan (DOI/USDA 2000).

International Fire Code

Created by the International Code Council, the International Fire Code (IFC) addresses a wide array of conditions hazardous to life and property, including fire, explosions, and hazardous materials handling or usage (although not a federal regulation, but rather the product of the International Code Council). The IFC places an emphasis on prescriptive and performance-based approaches to fire prevention and fire protection systems. Updated every 3 years, the IFC uses a hazards classification system to determine the appropriate measures to be incorporated to protect life and property (often times these measures include construction standards and specialized equipment). The IFC uses a permit system (based on hazard classification) to ensure that required measures are instituted (International Code Council 2020a).

International Wildland-Urban Interface Code

The International Wildland-Urban Interface Code is published by the International Code and is a model code addressing wildfire issues in low-density, rural residential areas or where residential areas abut open space (International Code Council 2020b). As of the time of this document being written, California is in the process of consolidating all state codes applicable to the wildland-urban interface into its own Wildland-Urban Interface Code.

State

Government Code

Government Code Sections 51175 through 51189 classify lands in California as fire hazard areas and requirements for management of property within those lands. CAL FIRE is responsible for classifying FHSZs based on statewide criteria, and makes the information available for public review. Further, local agencies must designate, by ordinance, Very High FHSZs within their jurisdiction based on the recommendations of CAL FIRE.

Government Code Section 51182 sets forth requirements for maintaining property within fire hazard areas, such as defensible space, vegetative fuels management, building materials and standards. Defensible space consisting of 100 feet of fuel modification on each side of a structure, but not beyond the property line unless findings conclude that the clearing is necessary to significantly reduce the risk of structure ignition in the event of a wildfire. Clearance on adjacent property shall only be conducted following written consent by the adjacent owner. Further, trees must be trimmed from within 10 feet of the outlet of a chimney or stovepipe, vegetation near buildings must be maintained, and roofs of structures must be cleared of vegetative materials. Exemptions may apply for buildings with an exterior constructed entirely of nonflammable materials.

California Code of Regulations

Title 14 Natural Resources

California Code of Regulations, Title 14, Division 1.5, Chapter 7, Subchapter 3, Fire Hazard, also sets forth requirements for defensible space if the distances specified above cannot be met. For example, options that have similar practical effects include noncombustible block walls or fences, 5 feet of noncombustible material horizontally around the structure, installing hardscape landscaping or reducing exposed windows on the side of the structure with a less-than-30-foot setback, or additional structure hardening such as those required in the California Building Standards Code (CBSC), as adopted by the SCMC..

Title 24 California Building Standards Code

California Building Standards Code

The California Building Standards Code (CBSC) regulates building materials, systems, and/or assemblies used in the exterior design and construction of new buildings located within a wildland-urban interface fire area. The purpose of the CBSC is to establish minimum standards for the protection of life and property by increasing the ability of a building located in any FHSZ within a State Responsibility Area or a wildland-urban interface fire area to resist the intrusion of flames or burning embers projected by a vegetation fire, and to contribute to a systematic reduction in conflagration losses. New buildings located in such areas must comply with the ignition-resistant construction standards outlined in CBC Chapter 7A.

The VHFHSZ designation on the Project site would require buildings to implement ignition-resistive construction and provide up to 200-feet of defensible space (treated, maintained vegetation) between structures and open space areas. Since the entire Proposed Project site is classified as VHFHSZ, the CBSC apply to all project buildings.

California Fire Code

Part 9 of CCR Title 24 contains the California Fire Code (CFC), which incorporates by adoption the International Fire Code with necessary California amendments. The purpose of this code is to establish the minimum requirements to safeguard the public health, safety, and general welfare from the hazards of fire, explosion, or dangerous conditions in new and existing buildings, structures, and premises, and to provide safety and assistance to firefighters and emergency responders during emergency operations. Chapter 49 of the CFC contains minimum standards for development in the wildland–urban interface and fire hazard areas.

The CFC and Office of the State Fire Marshal provide regulations and guidance for local agencies in the development and enforcement of fire safety standards.

Public Resources Code

Public Resource Code Section 4290 requires minimum fire safety standards related to defensible space that are applicable to residential, commercial and industrial building construction in State Responsibility Area lands and lands classified and designated as Very High FHSZs. These regulations include road standards for fire apparatus access, standards for signs identifying roads and buildings, fuel breaks and green belts, and minimum water supply requirements. It should be noted that these regulations do not supersede local regulations which equal or exceed minimum regulations required by the state.

Public Resource Code Section 4291 requires a reduction of fire hazards around buildings located adjacent to a mountainous area, forest-covered lands, brush-covered lands, grass-covered lands or land that is covered in flammable material. It is required to maintain a minimum 100 feet of vegetation management around all buildings and is the primary mechanism for conducting fire prevention activities on private property within CAL FIRE jurisdiction. Further, PRC 4291 requires the removal of dead or dying vegetative materials from the roof of a structure, and trees and shrubs must be trimmed from within 10 feet of the outlet of a chimney or stovepipe. Exemptions may apply for buildings with an exterior constructed entirely of nonflammable materials.

California Department of Forestry and Fire Protection (CAL FIRE)

CAL FIRE is tasked with reducing wildfire-related impacts and enhancing California's resources. CAL FIRE responds to all types of emergencies including wildland fires and residential/commercial structure fires. In addition, CAL FIRE is responsible for the protection of approximately 31 million acres of private land within the state and, at the local level, is responsible for inspecting defensible space around private residences. CAL FIRE is responsible for enforcing State of California fire safety codes included in the CCR and California Public Resources Codes. Public Resources Code 4291 states generally that any person operating any structure located on brush-covered lands or land covered with flammable material is required to maintain defensible space around the structure. 14 CCR Section 1254 identifies minimum clearance requirements required around utility poles. In SRAs within the jurisdiction of CAL FIRE, the Fire Safety Inspection Program is an important tool for community outreach and enforcement of state fire codes.

CAL FIRE also inspects utility facilities and makes recommendations regarding improvements in facility design and infrastructure. Joint inspections of facilities by CAL FIRE and the utility owner are recommended by CAL FIRE so that each entity may assess the current state of the facility and the successfully implement fire prevention techniques

and policies. Violations of state fire codes discovered during inspections are required to be brought into compliance with the established codes. If a CAL FIRE investigation reveals that a wildfire occurred as a result of a violation of a law or negligence, the responsible party could face criminal and/or misdemeanor charges. In cases where a violation of a law or negligence has occurred, CAL FIRE has established the Civil Cost Recovery Program, which requires parties liable for wildfires to pay for wildfire-related damages.

Fire Hazard Severity Zone Mapping

As previously discussed, CAL FIRE's FRAP database provides data documenting areas of significant fire hazards throughout the state, based on fuel loading, slope, fire history, weather, and other relevant factors as directed by Public Resources Code Sections 4201–4204 and Government Code Sections 51175–51189. FHSZs are ranked from Moderate to Very High, and are categorized for fire protection within a Federal Responsibility Area, State Responsibility Area, or Local Responsibility Area under the jurisdiction of a federal agency, CAL FIRE, or local agency, respectively. As noted above and depicted in Figure 4.19-1, Fire Hazard Severity Zone Map, the project site and surrounding area to the west is located within a Very High FHSZ.

California Strategic Fire Plan

The 2019 Strategic Plan (CAL FIRE 2019) is guided by CAL FIRE's mission to serve and safeguard the people and protect the property and resources of California as well as its vision to be the leader in providing fire prevention and protection, emergency response, and enhancement of natural resource systems. The Strategic Plan is organized into four goals. These goals include to improve core capabilities, enhance internal operations, ensure health and safety, and build an engaged, motivated and innovative workforce. These goals are further categorized into the following objectives to meet said goals.

- Analyze and integrate core operations functions at all levels of the Department.
- Evaluate and improve existing emergency response capabilities.
- Expand forestry and fire prevention through effective natural resource management programs, education, inspections, and land use planning.
- Strengthen post-incident assessments to create long-term improvements.
- Analyze business support functions and improve operational efficiencies.
- Define and effectively manage internal communication processes.
- Review and update communication processes to all external stakeholders.
- Create a secure, responsive, and integrated user-centric technology culture.
- Manage fiscal challenges to ensure adequate funding for critical programs.
- Promote employee behavioral health and physical fitness.
- Promote the safety of Department employees, partners, and the public.
- Address skill gaps and barriers through creative outreach and recruiting.
- Create and implement detailed training plans for all Department employees.
- Retain the Department workforce through purposeful engagement.

Mutual Aid Agreements

The California Disaster and Civil Defense Master Mutual Aid Agreement, as provided by the California Emergency Services Act, provides statewide mutual aid between and among local jurisdictions and the state. The statewide mutual aid system exists to ensure that adequate resources, facilities, and other supports are provided to jurisdictions whenever resources prove to be inadequate for a given situation. Each jurisdiction controls its own personnel and facilities but can give and receive help whenever needed. The LACFD participates in these mutual aid, automatic aid and other agreements with surrounding fire departments. In some instances the closest available resource may come from another fire department.

Local

The proposed project would be subject to state and federal agency planning documents described above, as well as the regional or local planning documents such as the City of Santa Clarita General Plan and the SCMC. In addition to the relevant plans, policies, and ordinances identified below, Section 4.14, Public Services, of this EIR provides information on the City's fire protection services.

Los Angeles County Fire Department, 2022 Strategic Fire Plan

The Los Angeles County Consolidated Fire Protection District's ("Fire Department") mission statement is to protect lives, property, and the environment by providing prompt, skillful, and cost-effective fire protection, and life safety services. The Department creates a Strategic Plan to outline its current state and goals. The goals of the Fire Department's Strategic Fire plan are as follows:

- Analyze the potential of wildfire threats to communities at the battalion level within and adjacent to the WUI.
- Prioritize within each battalion where hazardous fuel reduction projects can make the largest impact to protection of life, property, and natural resources.
- Identify, categorize, and prioritize the values and assets at risk at the battalion level through a detailed assessment.
- Establish and prioritize which battalions have the highest wildfire threat potential in regard to values and assets. Develop battalion specific maps identifying prioritized values and assets and at-risk communities.
- Develop battalion specific strategies and tactics within the Department's strategic fire plan.
- Determine large scale fire prevention strategies which parallel the County's land use planning strategies.
- Continue to reach out and assist with communities at risk to establish local FSCs and establish appropriate defensible space.
- Continue to work with communities at risk to develop Community Wildfire Protection Plans.

City of Santa Clarita General Plan

Safety Element

The Safety Element addresses safety issues arising from both naturally occurring and human-caused conditions, and presents goals and policies focused on reducing the potential risk of death, injuries, property damage, and

economic and social dislocation resulting from hazards. Fire hazards are included as a public safety and service issue relevant to the City. The following goals and policies related to fire hazards may be applicable to the project.

- Goal S 3: Protection of public safety infrastructure and property from fires.
 - Objective S 3.1: Provide adequate fire protection infrastructure to maintain acceptable service levels as established by the Los Angeles County Fire Department.
 - Policy S 3.1.1: Coordinate on planning for new fire stations to meet current and projected needs.
 - Policy S 3.1.2: Program adequate funding for capital fire protection costs and explore all feasible funding options to meet facility needs.
 - Policy S 3.1.3: Require adequate fire flow and adequate fire protection as a condition of approval for all new development. (Change required to meet Board of Forestry standards)
 - Policy S 3.1.4: Maintain adequate fire flow infrastructure, including identifying location of anticipated additional water supply, maintenance, and long-term integrity of water supply, which may include installation of additional reservoir capacity and/or distribution facilities. (Required to meet Board of Forestry standards)
 - Objective S 3.2: Provide for the specialized needs of fire protection services in both urban and wildland interface areas.
 - Policy S 3.2.1: Identify areas of the Santa Clarita Valley that are prone to wildland fire hazards adopt current CAL FIRE Fire Hazard Severity Zone maps and address these areas in fire safety plans. (Amended for specificity encouraged)
 - Policy S 3.2.2: Enforce standards for maintaining defensible space around structures, roadside fuel reductions, and consider establishing community fire breaks through clearing of dry brush and vegetation. (Required to meet Board of Forestry standards).
 - Policy S 3.2.3: Establish landscape guidelines for fire-prone areas with recommended plant materials and provide this information to builders and members of the public.
 - Policy S 3.2.4: Require sprinkler systems, fire resistant roofs and building materials, and other construction measures deemed necessary to prevent loss of life and property from wildland fires. (Required change to meet Board of Forestry standards)
 - Policy S 3.2.5: Ensure adequate secondary and emergency access for fire apparatus, which includes minimum requirements for road width, surface material, grade, and staging areas.
 - Policy S 3.2.6: Continue to provide information and training to the public on fire safety in wildland interface areas.

- Policy S 3.2.7: Implement wildfire mitigation strategies as identified in the Local Hazard Mitigation Plan, including community education, evaluating access routes, and prescribed burning. (Required to meet Board of Forestry standards)
 - Objective S 3.3: Provide for the specialized needs of fire protection services in both urban and wildland interface areas.
- Policy S 3.3.1: Plan for fire response times of no more than five minutes in urban areas, eight minutes in suburban areas, and 12 minutes in rural areas.
- Policy S 3.3.2: Require the installation and maintenance of street name signs on all new development and the posting of address numbers on all homes and businesses that are clearly visible from adjacent streets. (combined two existing policies)
- Policy S 3.3.3: Identify evacuation routes and their capacity, safety, and viability under a range of emergency scenarios, and plan for the evacuation needs of developments with only one point of access. (Required to meet Board of Forestry standards)
- Policy S 3.3.4: Maintain training standards in wildfire operations, incident command, evacuations, command and control, aviation, pre-fire engineering, prevention, public information, and resource management. (Required to meet Board of Forestry standards)
 - Objective S 3.4: Maintain development standards and land use regulations that prioritize fire safe development. (Required to meet Board of Forestry standards)
- Policy S 3.4.1: Ensure that all new development and redevelopment in Fire Hazard Severity Zones comply with Board of Forestry requirements, Fire Safe Regulations, and current versions of the California Building Code (CBC), California Fire Code (CFC), and Title 14 of the California Code of Regulations (CCR). (Required to meet Board of Forestry standards)
- Policy S 3.4.2: Strive to minimize new residential development in Very High Fire Hazard Severity Zones by giving processing and funding preference to new residential developments outside of the VHFHSZ. Ensure that all new residential developments located within the VHFHSZ meet or exceed all applicable Fire Safe Standards (Required to meet Board of Forestry standards)
- Policy S 3.4.4: Require new development in Very High Fire Hazard Severity Zones to develop fire protection plans and enter into long term vegetation landscape maintenance agreements, and maintain access for emergency response vehicles, and require new residential development to maintain Fuel Modification Plans (Required to meet Board of Forestry standards)
- Objective S 3.5: Work cooperatively with relevant organizations and agencies for fire prevention, protection, and response. (Added; Required to meet Board of Forestry standards)
 - Policy S 3.5.1: Continue to work with Los Angeles County Fire Department and CAL FIRE to ensure data is adequately recorded, documented, and received by CAL FIRE. (Required to meet Board of Forestry Standards)

- Policy S 3.5.2: Continue to work with partnering agencies, foster cooperative relationships, conduct periodic fire-related training, and participate in joint agency planning and preparedness meetings in preparation for incidents requiring multi-jurisdictional coordinated response. (Required to meet Board of Forestry Standards)
- Policy S 3.5.4: Work cooperatively with responsible agencies and nongovernmental organizations (NGOs) to plan for post-fire recovery. (Required to meet Board of Forestry standards) (moved)
- Goal S 7: Protection of the public through planning for disaster response and recovery, in order to minimize damage from emergency incidents or terrorist activities.
 - Objective S 7.1: Maintain and implement plans and procedures to prepare for disaster response and terrorist activities.
 - Policy S 7.1.5: Maintain strong cooperative working relationships with public agencies responsible for flood protection, fire protection, and hazard response. (SB 1241)

Land Use Element

- Objective LU 3.3: Ensure that the design of residential neighborhoods considers and includes measures to reduce impacts from natural or man-made hazards.
- Policy LU 3.3.2: In areas subject to wildland fire danger, ensure that land uses have adequate setbacks, fuel modification areas, and emergency access routes.
- Policy LU 3.3.4: Evaluate service levels for law enforcement and fire protection as needed to ensure that adequate response times are maintained as new residential development is occupied.
- Policy LU 7.1.1: Require shade trees within parking lots and adjacent to buildings to reduce the heat island effect, in consideration of Fire Department fuel modification restrictions.

Circulation Element

Policy C 2.2.9: Medians constructed in arterial streets should be provided with paved crossover points for emergency vehicles, where deemed necessary by the Fire Department.

Conservation and Open Space Element

- Policy CO 2.2.2: Ensure that graded slopes in hillside areas are revegetated with native drought tolerant plants or other approved vegetation to blend manufactured slopes with adjacent natural hillsides, in consideration of fire safety and slope stability requirements.
- Policy CO 3.6.5: Ensure revegetation of graded areas and slopes adjacent to natural open space areas with native plants (consistent with fire prevention requirements).
- Policy CO 10.1.6: Delineate open space uses within hazardous areas to protect public health and safety, which may include areas subject to seismic rupture, flooding, wildfires, or unsafe levels of noise or air pollution.

Policy CO 10.1.14: Protect open space from human activity that may harm or degrade natural areas, including but not limited to off road motorized vehicles, vandalism, campfires, overuse, pets, noise, excessive lighting, dumping, or other similar activities.

City of Santa Clarita Fire Code

The SCMC adopted, with local amendments, the California Fire Code (24 CCR Part 9). The SCMC also incorporates by references Title 32 of the Los Angeles County Code, also known as the County of Los Angeles Fire Code (City of Santa Clarita 2023).

Los Angeles County Fire Code

The Los Angeles County Fire Code (County of Los Angeles. 2023b) adopts, with amendments, the 2022 California Fire Code, Part 9 of California Code of Regulations Title 24, including current and future errata and supplements. Los Angeles County also adopts Chapters 1–7, 9–10, 12, 20–37, 39–40, 50–51, 53–56, 59–67, and 80 of the 2021 Edition of the International Fire Code specifically for sections that were not adopted as part of the 2022 California Fire Code. Lastly, Los Angeles County also added Chapters 81-83 and Appendices 0, PP, QQ, and RR to their Fire Code.

City of Santa Clarita Hazard Mitigation Plan

The City of Santa Clarita recognized the need to reduce the scale and impacts of hazards. As a result, the City prepared a mitigation plan that states the aspirations and specific courses of action it intends to follow to reduce vulnerability and exposure to future hazard events, such as wildfires. The primary purpose of the Plan was to document known hazards and identify potential community actions that can be implemented over the short- and long-term that would result in a reduction in risk and potential future losses citywide. The City proposed many actions, including Wildfire Action No. 10 which states, "City to encourage all new homes and major remodels involving roof additions that are located in the interface to have fire resistant roofs and residential sprinkler systems."

4.19.3 Thresholds of Significance

The significance criteria used to evaluate the proposed project's impacts related to wildfire are based on Appendix G of the CEQA Guidelines. According to Appendix G of the CEQA Guidelines, a significant impact related to wildfire would occur if the project is located in or near state responsibility areas or lands classified as very high fire hazard severity zone and would:

- 1. Substantially impair an adopted emergency response plan or emergency evacuation plan;
- 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;
- Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency
 water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary
 or ongoing impacts to the environment; or
- 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.

4.19.4 Impact Analysis

Threshold FIRE-1: Would the project substantially impair an adopted emergency response plan or emergency evacuation plan?

The 2023 Los Angeles County Operational Area Emergency Operations Plan (County of Los Angeles 2023c) describes a comprehensive emergency management system that provides for a planned response to disaster situations associated with natural disasters, technological incidents, terrorism, and nuclear-related incidents within the County of Los Angeles. These plans delineate operational concepts relating to various emergency situations, identify components of the Emergency Management Organization, and describe the overall responsibilities for protecting life and property and providing for the overall well-being of the population. The plan also identifies the sources of outside support that might be provided (through mutual aid and specific statutory authorities) by other jurisdictions, state and federal agencies, and the private sector.

As mentioned in Chapter 3, Project Description and Section 4.16, Transportation, the project would include a number of off-site infrastructure improvements that would also likely reduce the evacuation times of project residents compared to if they were to evacuate using existing infrastructure. These upgrades would include street improvements along Wiley Canyon Road and its intersecting streets, including Fourl Road, Canerwell Street, Valley Oak Court, and Calgrove Boulevard comprised of three new roundabouts, changes to existing directional signage, and the intersection of Calgrove Boulevard and I-5 located at the southwest corner of the project site would be signalized. The project would also include emergency access via Hawkbryn Avenue at the northwestern corner of the site.

The project's planned interior road network and the existing regional road system that it interconnects with provide multi-directional primary and secondary emergency evacuation routes consistent with most developments in this area. Consistent with the County of Los Angeles evacuation approach, major ground transportation corridors in the area would be used as primary evacuation routes during an evacuation effort. The road systems were evaluated to determine the best routes for fire response equipment and "probable" evacuation routes for relocating people to designated safety areas. The primary roadways that would be used for evacuation from the Project site are Wiley Canyon Road, Calgrove Boulevard, and Lyons Avenue. As shown in Figure 4.19-3, Fire Evacuation Routes. These roads provide access to urbanized areas and major traffic corridors including I-5.

During an emergency evacuation from the project, the primary and secondary roadways may provide citizen egress while responding emergency vehicles are inbound. Because the roadways are all designed to meet or exceed County of Los Angeles requirements, unobstructed travel lane widths, shoulders, vehicle turnouts, adequate parking, turning radius, grade maximums, signals at intersections, and roadside fuel modification zones, potential conflicts that could reduce the roadway efficiency are minimized, allowing for smoother evacuations.

According to a conservative evacuation modeling approach performed by CR Associates with input from Dudek and included in an Evacuation Plan for the project (Appendix N), it would take between 42 minutes and 63 minutes to evacuate the existing land uses and 52 minutes to evacuate the project. Under this scenario, the project would not cause an increase in evacuation time for evacuees leaving the communities east of the proposed project off of Calgrove Boulevard, and the project would cause an increase of 15 minutes to the community directly north of the proposed project and south of Wabuska Street. Using a conservative approach, the worst-case scenario was assumed, in which all vehicles belonging to households in the study area would be used in the evacuation, instead of the necessary number of vehicles needed to evacuate the impacted population. Additionally, under extreme fire weather events, it is unlikely

that evacuation would occur to the east and this analysis assumes traffic evacuating from both the project and nearby communities would use Wiley Canyon Road to travel north to more urbanized, fire-safe areas or access I-5 via Calgrove Boulevard to leave the area. There is no evacuation timeframe threshold that projects must meet in order to avoid a CEQA impact or to be consistent with codes, regulations or policies. Regardless, the project has provided a comprehensive evacuation evaluation, assuming a worst case scenario with peak occupancy conditions.

The proposed circulation improvements around and within the project site would provide additional access for potential movement of emergency equipment. Improvements such as the traffic calming features and the Hawkbryn Ave. emergency access would improve the ability of emergency personnel to access the site while the interior roadways constructed to LACFD fire apparatus access standards would improve their ability to navigate within the site. The traffic calming features in the form of roundabouts and similar offsite improvements would also aid in the evacuation of project residents as well as adjacent residents. Due to the circulatory improvements associated with the project and the results of the evacuation analysis, it is found that implementation of the proposed project would increase emergency access to the project site and nearby uses and would not impair an adopted emergency response plan or emergency evacuation plan, impacts would be **less than significant.** No mitigation is required.

Threshold FIRE-2: Would the project, 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?

Construction

Project construction would introduce potential ignition sources to the project site, including the use of heavy machinery and the potential for sparks during welding activities or other hot work. As such, impacts during construction would be potentially significant. However, the project would be required to comply with City, State and LACFD requirements for construction activities in hazardous fire areas, including fire safety practices, to reduce the possibility of fires during construction activities. Further, as stated in MM-FIRE-1 the project would be subject to additional requirements, including limiting or ceasing construction work during high-wind weather events. Additionally, as outlined in MM-FIRE-2, vegetation management requirements would be implemented at the start of and throughout all phases of construction, and combustible materials would not be brought on site until site improvements (e.g., utilities, access roads, fire hydrants, fuel modification zones) have been implemented and approved by LACFD. Electricity is transported to the project area via overhead transmission lines in Wiley Canyon Road at the north and south ends of the project site (SCE 2019). Existing power poles and overhead electric lines would be removed along the western boundary of the site adjacent to the I-5 freeway, with the exception of select power poles and overhead lines at the southern end of the site adjacent to the proposed drainage basin, and updated, underground electrical lines would be installed. The pre-construction requirements outlined in MM-FIRE-2 would reduce the risk of wildfire ignition and spread on the project site during construction activities. Vegetation management would also reduce the risk of wildfire spreading from within the active construction areas to offside fuel beds. Provided site improvements and vegetation management requirements are appropriately implemented and approved by LACFD, construction activities are not anticipated to exacerbate wildfire risk such that project workers would be exposed to the uncontrolled spread of a wildfire or pollutant concentrations from a wildfire. Therefore, with implementation of MM-FIRE-1 and MM-FIRE-2, construction impacts would be less than significant with mitigation incorporated.

Operation

The project includes the development of a senior facility consisting of 130 independent living units, 61 assisted living units, and 26 memory care beds, a total of 379 multifamily residential units, 8,914 square feet of commercial retail space, and vast recreational and open space areas. The project site is considered a VHFHSZ within an LRA (see Figure 4.19-1). The site currently has varied vegetation but is mostly consisted of non-native vegetation that has established after human disturbance. The current vegetation is generally fine diameter fuels that would likely result in a fast-moving, low-intensity fire. Existing potential ignition sources include recreational vehicle and boat storage, powerlines, off-site residential neighborhoods, arson, and vehicle-related ignitions from I-5 and Wiley Canyon Road.

While the project would add more residents to the area, research indicates that the type of dense developments, like the proposed project, are not associated with increased vegetation ignitions. Housing density directly influences susceptibility to fire because in higher density developments, there is one interface (the community perimeter) with the wildlands whereas lower density development creates more structural exposure to wildlands, less or no ongoing maintained landscapes (an intermix rather than interface), and consequently more difficulty for fire resources to protect structures. The intermix includes structures amongst the unmaintained fuels whereas the proposed project would convert all fuels within the footprint and provides a wide, managed fuel modification zone separating homes from unmaintained fuel and creating a condition that makes defense easier. A study by Syphard and Keeley (2013) states that "The WUI [wildland urban interface], where housing density is low to intermediate is an apparent influence in most ignition maps" further enforcing the conclusion that lower density housing poses a higher ignition risk than higher density communities. They also state that "Development of low-density, exurban housing may also lead to more homes being destroyed by fire" (Syphard et al. 2013). A vast wildland urban interface already exists in the areas adjacent to the development site, with some older, more fire-vulnerable structures, constructed before stringent fire code requirements were imposed on residential development, with varying levels of maintained fuel modification buffers in the area.

Slope

Slope can have a strong influence on fire behavior in the absence of wind. Without the influence of wind, fire will travel up-slope quickly as convective and radiant heat from the flames and smoke heat, cure, and ignite the vegetation up-slope from it. A fire burning downhill will have a slower rate of spread since the heat transfer to unburned vegetation is more reliant on radiant and conductive heating without as much heat transfer via convection. Topographical features such as box canyons and saddles can also amplify wind speeds. However, as mentioned in Section 4.9 Hydrology and Water Quality and Section 4.19.1 Existing Conditions, the site is relatively flat, and the development associated with the project would involve earthwork but would not create any problematic slopes or topographic features that are likely to affect fire behavior or weather conditions.

Prevailing Winds

The prevailing wind pattern in the project area during the summer is from the southwest (on-shore), but during the winter is from the northwest to northeast. Additionally, a diurnal wind pattern results in winds averaging approximately 9 miles per hour (mph) from the southwest (Pacific Ocean) during the day and winds from the east (inland) at night, averaging approximately 3 mph during the fire season (WRCC 2024). Diurnal wind directions and speeds can change day to day with trends differing between seasons. However, the project site is subject to periodic extreme fire weather conditions that occur throughout southern California, associated with drought conditions and Santa Ana winds, when wind speeds may exceed 50 mph.

Vegetation Management and Setbacks

As shown in Table 4.19-1, most of the site is covered in non-native vegetation that has established after human disturbance to the area. The dominant vegetation is fine diameter fuels such as grasses and small shrubs. Variations in vegetative cover type and species composition have a direct effect on fire behavior. For example, grasses produce lower intensity, higher spread rate fires, while California sagebrush scrub can produce higher heat intensity and higher flame lengths under strong, dry wind patterns, but does not typically ignite or spread as quickly as light, flashy grass fuels.

With the development of the senior living facility, multi-family residential, commercial uses, and open space and recreational uses, new potential ignition sources would be introduced to the project site, but the site would be largely converted from readily ignitable fuels to structures and landscaped areas, consisting of ignition resistant building materials. The project would be developed according to all existing building codes and fire codes, as indicated in the Santa Clarita Fire Code, which adopts the Los Angeles County Fire Code, which adopts with amendments the California Fire Code. These local codes are at least as stringent as those establishes in state codes. Included in these codes are provisions for fuel modification and defensible space for fire prevention and safety.

While the project is near an open-space area to the west, the project is separated from that area by I-5. Additionally, the project would construct a 5-foot-tall wall atop a 5-foot-high earthen berm between the project and I-5 and would convert readily ignitable fuels to structures and maintained landscaped areas. The other closest open space is east of the northern portion of the project but is separated from the project by a large retaining wall and the nearest portion would be maintained in a thinned state as part of the fuel modification zones associated with the project. As required by the Fire Code, a fuel management zone is a strip of land where combustible vegetation has been removed and/or modified and partially or totally replaced with more adequately spaced, drought-tolerant, fire resistant plants in order to provide a reasonable level of protection to structures from wildland fire. In accordance with Los Angeles County Fire Code Section 325.2.1, which exceed the 2022 California Fire Code (Section 4907 — Defensible Space), Government Code sections 51175 - 51189, and Public Resources Code section 4291, a fuel management zone is required around every building that is designed primarily for human habitation or use within a VHFHSZ. A typical landscape/fuel modification installation per the County's Fire Code consists of a 30-foot-wide irrigated zone (Zone A) and a 70-foot-wide irrigated zone (Zone B) for a total of 100 feet in width on the periphery of the project site, beginning at the structure. An additional 100-foot-wide thinning zone (Zone C) is required when an extra hazard has been identified by fuel modification personnel (County of Los Angeles n.d.). Additionally, in accordance with Los Angeles County Fire Code Section 305.10, a minimum of 10 feet on each side of every roadway is required to be cleared of all flammable vegetation, but this does not apply to single specimens of trees, ornamental shrubbery, or cultivated ground cover such as green grass, ivy, succulents, or similar plants used as ground cover, provided that they do not form a means of readily transmitting fire.

The project would have fuel modification zones first consisting of Zone 0, which is a 5-foot-wdie ember resistant zone, Zone A which is a 30-foot wide permanently irrigated clear area next to structures that is maintained by owners. The next closest zone to the structures would be a minimum 30-foot-wide up to 70-foot-wide permanently irrigated Zone B that would include engineered slopes. The final section, Zone C, would be a minimum of 50 feet wide and up to 100 feet wide and would not be irrigated, but would be thinned. Altogether, the planned fuel modification would provide up to 200 feet total from the structures. Parts of the proposed project would not be able to achieve the entire 200-foot width fuel modification zone onsite, but the offsite areas such as the residential community to the north and Interstate 5 to the west are fuel modification zone equivalent areas and will be maintained by respective property owners and Caltrans. Additionally, a 6-foot-tall concrete masonry unit (CMU) wall would be constructed along the entire northern and southern boundaries of the project with a 5-foot-tall CMU wall

atop a 5-foot-tall earthen berm along the western boundary. Fuel modification would occur throughout the project site prior to construction and the responsible parties displayed in Figures 4.19-4A and 4.19-4B would conduct annual fuel modification (or more often, as determined by LACFD) to reduce the potential for fire ignition and spread. However, in order to reduce potentially significant impacts, mitigation measure **MM-FIRE-3** is included to ensure that plant selection for the project would be in accordance with the fuel modification plant selection guidelines of LACFD. As such, impacts would be **less than significant with incorporation of mitigation**.

Building Materials and Other Factors

The project would be developed in accordance with Santa Clarita and Los Angeles County Fire Codes which are at least as stringent as the 2022 California Fire Code. These codes include provisions for building materials, infrastructure, and defensible space, site access, and fire protection systems (e.g., water, fire flow, fire hydrants, interior fire sprinklers). All new structures within the project would be constructed in accordance with Los Angeles County Fire Code and 2022 California Fire Code standards. Each of the proposed dwelling units would comply with the enhanced ignition-resistant construction standards of the 2022 California Building Code (Chapter 7A). These requirements address roofs, eaves, exterior walls, vents, appendages, windows, and doors and result in hardened structures that have been proven to perform at high levels (resist ignition) during the typically short duration of exposure to burning vegetation from wildfires. Further, infrastructure, such as project roads, water service, fire hydrants, and automatic fire sprinkler systems would be implemented in accordance LACFD Standards, and nationally accepted fire protection standards.

Summary

Given the anticipated growing population of Los Angeles County's wildland urban interface areas, including in the City of Santa Clarita, and the region's fire history, it can be anticipated that periodic wildfires will occur in the open space areas of Los Angeles County, with the natural open spaces west and northeast of the project site being no exception. Given the climatic, vegetative, topographic characteristics, and local fire history of the area, once developed the project site could be subject to periodic wildfires that may start on, burn onto, or spot into the site.

The proposed project would introduce potential ignition sources to the site; however, all new structures would be constructed to the Los Angeles County and Santa Clarita Fire Codes, 2022 CBC Chapter 7A, and 2022 CFC standards. As discussed, the ignition-resistant construction standards required for development in a FHSZ address roofs, eaves, exterior walls, vents, appendages, windows, and doors and result in hardened structures. The project would implement a fire hardened landscape, highly ignition resistant residential dwelling units, and conversion of flashy fuels (non-native grasslands) to developed areas, with designated review of all landscaping and maintenance of fuel modification areas. Fires from off-site would not have continuous fuels across this site and would therefore be expected to burn around and/or over the site via spotting. The project is not expected to result in the heightened fire hazard typically associated with the wildland urban interface, since the entirety of the project is being converted to high density ignition resistant structures and landscaping. The fire hazard of wildland urban interface areas is more closely correlated to lower density residential areas that have combustible vegetation between homes that allow for fire spread. The ignition-resistant features of the project would form a redundant system of protection to minimize the likelihood of exposing residents and visitors, as well as structures, to the uncontrolled spread of a wildfire. This same fire protection system would provide protections from an on-site fire spreading to off-site vegetation. As such, accidental fires within the maintained landscape or structures in the Wiley Canyon Project would have limited ability to spread. It should be noted that while these standards would provide a high level of protection to structures for the project, there is no guarantee that compliance with these standards would prevent damage or destruction of structures by fire in all cases.

Wildlands near the project site are expected to be exposed to periodic wildfire ignition and spread and may be subject to nearby wildfire. A response map update, including roads and fire hydrant locations, in a format compatible with current department mapping would be provided to the LACFD for approval. Further, adequate water supply, approved paved access roadways and site improvements within the active development area would be in place, including utilities, operable fire hydrants, an approved, temporary roadway surface, and fuel modification zones established, prior to any combustibles on site, as required by **MM-FIRE-2**.

The project, once developed, would not facilitate wildfire spread and would be expected to reduce fire intensity to levels that would be manageable by firefighting resources for protecting the site's structures, especially given the ignition resistance of the structures and the planned ongoing maintenance of the entire site landscape. Therefore, wildfire occurrence, frequency or size would not be expected to be significantly exacerbated by construction of the project. With adherence to all required building and fire codes, and with implementation of the mitigation measures as outlined in MM-FIRE-1 through MM-FIRE-3, the project would not exacerbate wildfire risks, due to slope, prevailing winds, and other factors, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire, and impacts would be less than significant with mitigation incorporated.

Threshold FIRE-3: Would the project require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?

The project would include the development of the senior living facility, multi-family residential, commercial uses, and open space and recreational uses. The project would include installation and maintenance of associated infrastructure including driveways and roadways, connections to service utilities (e.g., water, wastewater, stormwater drainage, electric power, natural gas, and telecommunications services), water drainage and water quality improvements (e.g., stormwater retention basin), and fuel breaks (e.g., fuel modification zones).

Vegetation Management

In accordance with the LACFD's defensible space and fuel management zone standards, FMZs would be provided for those portions of the proposed development that are adjacent to open space areas. The project would include up to 200-feet of fuel modification between the natural open space area to the northeast and west and on-site structures. The FMZ specifications would be in compliance with the requirements described in the Vegetation Management and Setbacks sub-section in response to Threshold FIRE-2. FMZs would be maintained on at least an annual basis or more often as needed to maintain the fuel modification buffer function by the responsible party shown in Figure 4.19-4A and 4.19-4B. FMZs are designed to provide vegetation buffers that gradually reduce fire intensity and flame lengths from advancing fire, and would reduce, rather than exacerbate, wildfire risk. Per MM-FIRE-2, adequate defensible space must be created before bringing any combustible materials on to the project site, and vegetation management activities would occur prior to the start of construction and throughout the life of the project. Consequently, the associated vegetation management activities would not exacerbate fire risk, provided that fuel modification and other vegetation management activities are implemented and enforced according to city, county and state requirements. The proposed vegetation management activities would reduce the fire risk by thinning or removing combustible vegetation and implementing a landscape plan with more adequately spaced. drought-tolerant, low-fuel-volume plants in accordance with LACFD plant selection guidelines in order to provide a reasonable level of protection to structures from wildland fire.

Roads

The project would involve construction of an internal circulation network of access roads as well as upgrades to off-site roadways as mentioned previously. The presence of increased human activity and vehicles along newly installed roads would introduce new potential ignition sources to the project area. However, vegetation management would be required along all roadways internal and external to the project site. Construction of project roadways and connections to existing roadways would provide increased accessibility for LACFD to the project site. Further, site access, including road widths and connectivity, would comply with applicable emergency access standards that result in roads that can facilitate emergency vehicle access during project construction and operation. As required under the Los Angeles County Fire Code Section 325.10, a FMZ of at least 10 feet on each side of all roads and driveways in addition to an unobstructed vertical clearance of 13 feet, 6-inches above the roadways. Roadside fuel modification consists of removing combustible vegetation and/or maintaining ornamental landscapes, including trees, clear of dead and dying plant materials. Roadside fuel modification would be maintained by the responsible party shown in Figure 4.19-4A and 4.19-4B. Therefore, installation and maintenance of site access roads in accordance with all relevant development codes would not exacerbate wildfire risk.

Utilities

As discussed in Section 4.18, Utilities and Service Systems, existing utility service lines are located within the vicinity of the project site, and connection to utility service lines would be implemented as part of the project. Connections to utility service lines, including those for water, wastewater, stormwater drainage, electric power, natural gas, and telecommunications services, would be extended from their current locations nearby the project site to the proposed buildings. Given that connecting utilities from their current locations to the project site would require ground disturbance and the use of heavy machinery associated with trenching, the installation of these utility service lines would introduce new potential sources of ignition to the site, such as the use of heavy machinery, welding, or other hot work. However, as previously discussed, vegetation management activities would occur prior to the start of construction, which would reduce the likelihood of fire ignition during installation and connection of utilities.

The water distribution system for the proposed project would tie into an existing 12-inch diameter water line located in Wiley Canyon Road that extends out along Old Wiley Canyon Road. The local distribution system mains within the project area would connect to this existing line near the north end of the project site in two separate connections. The proposed project would require the construction of the entire on-site water distribution system as well as the connection of the new facilities to the existing domestic water and fire flow system. Water supply and fire hydrants would be consistent with applicable Design Standards. Installation of water service and fire hydrants would reduce, rather than exacerbate, fire risk on site.

Electricity would be provided to the project site by Southern California Edison. Extensions of existing infrastructure into the project site would be obtained from existing lines and connections within the area. On-site connections would likely be completed by either trenchless technology or completion of open trenching, to the depth of the existing underground infrastructure. Undergrounding of most of the powerlines associated with the project would reduce the fire hazard. Vegetation management would occur under any overhead powerlines in accordance with Los Angeles Fire Code Section 325.1.

The project property owners would be responsible for long term funding and maintenance of private roads and fire protection systems, including fire sprinklers and private fire hydrants. Per **MM-FIRE-1**, all underground utilities, hydrants, water mains, curbs, gutters, and sidewalks would be installed, and the drive surface would be approved prior to combustibles being brought on site.

Summary

Given that the activities involved with installation or maintenance of associated infrastructure would require ground disturbance and the use of heavy machinery associated with trenching, grading, site work, and other construction and maintenance activities, the installation of related infrastructure could potentially result in temporary or ongoing impacts to the environment. However, the installation and maintenance of roads, service utilities, drainage and water quality improvements, and vegetation management activities are part of the project analyzed herein. As such, any potential temporary or ongoing environmental impacts related to these components of the proposed project have been accounted for and analyzed in this EIR as part of the impact assessment conducted for the entirety of the project. Additionally, the project would be required to comply with all regulatory requirements and mitigation measures outlined within this EIR for the purposes of mitigating impacts associated with trenching, grading, site work, and the use of heavy machinery. No adverse physical effects beyond those already disclosed in this EIR would occur as a result of implementation of the project's associated infrastructure.

Installation and maintenance of project roads, service utilities, fuel modification, drainage and water quality improvements, and other associated infrastructure would not exacerbate wildfire risks provided that the mitigation measures outlined in MM-FIRE-2 and MM-FIRE-3 are implemented along with appropriate fire prevention, access, and vegetation management activities as required by the LACFD, city and county codes, and state requirements. Therefore, the installation and maintenance of associated infrastructure would not exacerbate wildfire risk or result in impacts to the environment beyond those already disclosed in this EIR, and impacts would be less than significant with mitigation incorporated.

Threshold FIRE-4: Would the project 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?

Vegetation plays a vital role in maintaining existing drainage patterns and the stability of soils. Plant roots stabilize the soil, and leaves, stems and branches intercept and slow water, allowing it to more effectively percolate into the soil. Removal of surface vegetation reduces the ability of the soil surface to absorb rainwater and can allow for increased runoff that may include large amounts of debris or mud-flows. If hydrophobic conditions exist post-fire, the rate of surface water runoff is increased as water percolation into the soil is reduced (Moench and Fusaro 2012). The potential for surface runoff and debris flows therefore increases for areas recently burned by large wildfires (Moench and Fusaro 2012). As previously discussed and shown in Figure 4.19-2, Fire History, one fire has burned onto the project site (unnamed 1953) and 125 wildfires have burned within a 5 mile radius of the project site.

The project would be developed adjacent to the South Fork of the Santa Clara River. Under existing conditions, if a fire were to occur in the area, vegetation that stabilizes soils on the project site and adjacent to the river could be burned and lead to increased erosion. As part of the project, three drainage basins would be installed per city and county requirements. The project would involve the installation of non-flammable impervious surfaces such as roadways that would divert stormwater. In the unlikely event of a fire, these non-flammable impervious surfaces would remain and continue to divert stormwater and thus result in lower rates of erosion and siltation of the river compared to pre-project conditions.

Once developed, the project site would be graded to a flat surface. Proposed Lot 6 would be an open space lot and as mentioned in Section 4.6 Geology and Soils, has been identified as susceptible to earthquake induced landslides, but no history of landslides was found during the site-specific geotechnical analysis. While the thinning associated with Zone C of the fuel modification plan in this area would reduce some of the vegetation in this sloped area northeast of the project, not all vegetation is removed. This would allow root systems to remain and stabilize

the slope. A fire burning through the area of thinned vegetation would burn at a lower intensity due to the reduced fuels available. This would result in a higher likelihood that root systems survive and continue to provide slope stabilization. A fire burning through untreated fuels would burn at a higher intensity and possibly result in no vegetative matter remaining which would increase erosion potential. However, given the fire protection features of the project such as the water supply system, fire sprinklers, ignition resistant construction, fire access, and fuel modification, it is unlikely that any fire would spread from the project to this area.

In summary, while a fire occurring on a landscape can increase erosion potential, the project would be stabilized during the construction phase, include infrastructure for diverting stormwater, and would include thinning of fuels on the most prominent slope which would reduce fire intensity, giving existing plants the best chance to survive and continue to provide slope stabilization. Due to those factors, the project would not expose people or structures to downslope or downstream flooding or landslides as a result of runoff, post-fire slope instability, or drainage changes. Therefore, impacts would be **less than significant**.

4.19.5 Mitigation Measures

MM-FIRE-1

Extreme Fire Day Ignition Avoidance. All construction and maintenance activities must temporarily cease during Red Flag Warnings. The contractor's superintendent must coordinate with personnel to determine which low fire hazard activities may occur. Should the Fire Department declare a Red Flag Warning affecting the Wiley Canyon Project site, the same work activity restrictions occurring during National Weather Service Red Flag Warning periods apply.

MM-FIRE-2

Pre-Construction Requirements. Vegetation management must be conducted before the start of construction and throughout all construction phases. Perimeter fuel modification must be implemented and approved by the Fire Department before bringing combustible materials on site. Existing flammable vegetation must be reduced by 50% on vacant lots upon commencement of construction. Caution must be used to avoid causing erosion or ground (including slope) instability or water runoff due to vegetation removal, vegetation management, maintenance, landscaping or irrigation.

Before delivering lumber or combustible materials onto the site, site improvements within the active development area must be in place, including utilities, operable fire hydrants, an approved, temporary roadway surface, and fuel modification zones established. These features must be approved by the Fire Department before combustibles being brought on site.

MM-FIRF-3

LACFD FMZ Plant Selection Guideline Compliant. The Fire Department publishes a list of plants that would not contribute to extreme fire behavior are suitable for Fuel Modification Zones. All plants included within fuel modification zones of the proposed project must be from this list and if a minimum distance from structures is stated for the species, such listed species may not be planted closer to any structures associated with the proposed project than the stated minimum distance. No plant that is not listed by the Fire Department on its Fuel Modification Zone Plant Selection Guidelines may be included within a Fuel Modification Zone of the proposed Project without approval by Fire Department.

4.19.6 Level of Significance After Mitigation

With implementation of fire protection and prevention measures as outlined in **MM-FIRE-1** through **MM-FIRE-3**, impacts related to wildfire would be less than significant.

4.19.7 Cumulative Effects

The cumulative context considered for Project wildfire impacts in Los Angeles County, and more specifically, the City of Santa Clarita. As discussed in Section 4.19.1, CAL FIRE has mapped areas of fire hazards in the state based on fuels, terrain, weather, and other relevant factors. As described above, the project site is located in a Very High FHSZ. The project, combined with other projects in the region, would increase the population and/or activities and potential ignition sources in the area, which may increase the potential of a wildfire and increase the number of people and structures exposed to risk of loss, injury, or death from wildfires. However, as mentioned earlier, given the density of the development that is planned, the risk is lower than it would in a low-density wildland urban intermix. Individual projects located within LACFD jurisdiction are required to comply with applicable County fire codes and their respective building codes, which have been increasingly strengthened as a result of severe wildfires that have occurred in the last two decades. The fire and building codes include fire prevention and protection features that reduce the likelihood of a fire igniting in a specific project and spreading to off-site vegetated areas. These codes also protect projects from wildfires that may occur in the area through implementation of brush management and fuel management zones, ensuring adequate water supply, preparation of fire protection plans, and other measures.

Suggestions that placing new residential projects in the County's wildland-urban interface would increase the risk of fire ignition are not consistent with available research. According to the available evidence, no large fires in Southern California since 1990 were determined to have been started within a high-density, ignition-resistant development. Syphard and Keeley (2015) summarized all wildfire ignitions included in the CAL FIRE FRAP database dating back over 100 years. They found that in San Diego County (which is similar to the Santa Clarita fire environment), equipment-caused fires were by far the most numerous, and these also accounted for most of the area burned; power-line fires were a close second. Ignitions classified as equipment-caused frequently resulted from exhaust or sparks from power saws or other equipment with gas or electrical motors, such as lawn mowers, trimmers, or tractors (Syphard and Keeley 2015). These ignition sources are typically associated with lower-density housing, not higher-density housing such as that proposed in the Project. In addition, electrical transmission lines would generally be undergrounded in the project area, mitigating the risk from electrical transmission line vegetation ignitions.

Data indicate that lower-density housing poses greater ignition risk. In the Southern California study, ignitions were more likely to occur close to roads and structures, and at intermediate structure densities (Syphard and Keeley 2015). This is likely because lower-density housing creates a wildland – urban intermix rather than an interface. The intermix places housing among unmaintained fuels, whereas higher-density housing, such as the project, converts all fuels within the footprint and provides a wide, managed fuel modification zone separating homes from unmaintained fuel. Syphard and Keeley (2015) determined that "[t]he WUI [wildland urban interface], where housing density is low to intermediate, is an apparent influence in most ignition maps." This further enforces the notion that lower-density housing is a larger ignition issue than higher-density communities. A different study found that "development of low-density, exurban housing may also lead to more homes being destroyed by fire" (Syphard et al. 2013). Neither of these studies considered the fire hazard and risk reduction associated with fire modification zones and ignition-resistant structures. In addition, another study found that frequent fires and lower-density housing growth may lead to the expansion of highly flammable exotic grasses that can further increase the probability of ignitions (Keeley et al. 2012). This is not the case with the project, where the landscapes would be managed and maintained to remove exotic fuels that may become established over time. The plant palette restrictions in accordance with LACFD guidelines, combined with maintenance by the responsible parties, would minimize the establishment and expansion of exotic plants, including grasses. Based on research of the relevant literature and extensive conversations with active and retired fire operations and prevention officers, there is no substantial evidence that new high-density developments built to the requirements of the LACFD and modern building codes increase the risk of wildfire ignition. Rather, the data indicate that roadways, electrical distribution lines, and lower-density residential projects are the primary causes of increased wildfire ignition. The project would provide roadside fuel modification throughout the project site, and electrical lines would be subterranean.

Furthermore, other cumulatively considerable projects would be required to comply with Los Angeles County Fire Code vegetation clearance requirements. Los Angeles County Fire Code, applicable building codes, and fire protection plan requirements, ensure that every project approved for construction includes adequate emergency access. Roads for all proposed projects are required to meet minimum widths, have all-weather surface, and be capable of supporting the imposed loads of responding emergency apparatus. The project and all other future development projects in the service area would be subject to discretionary review by the LACFD and would be required to comply with the County Fire Code and other relevant code requirements and regulations related to fire safety, building construction, access, fire flow, and fuel modification. Therefore, because all projects are required to comply with these requirements, cumulative impacts related to increased wildfire hazards and emergency response and access would be **less than significant**.

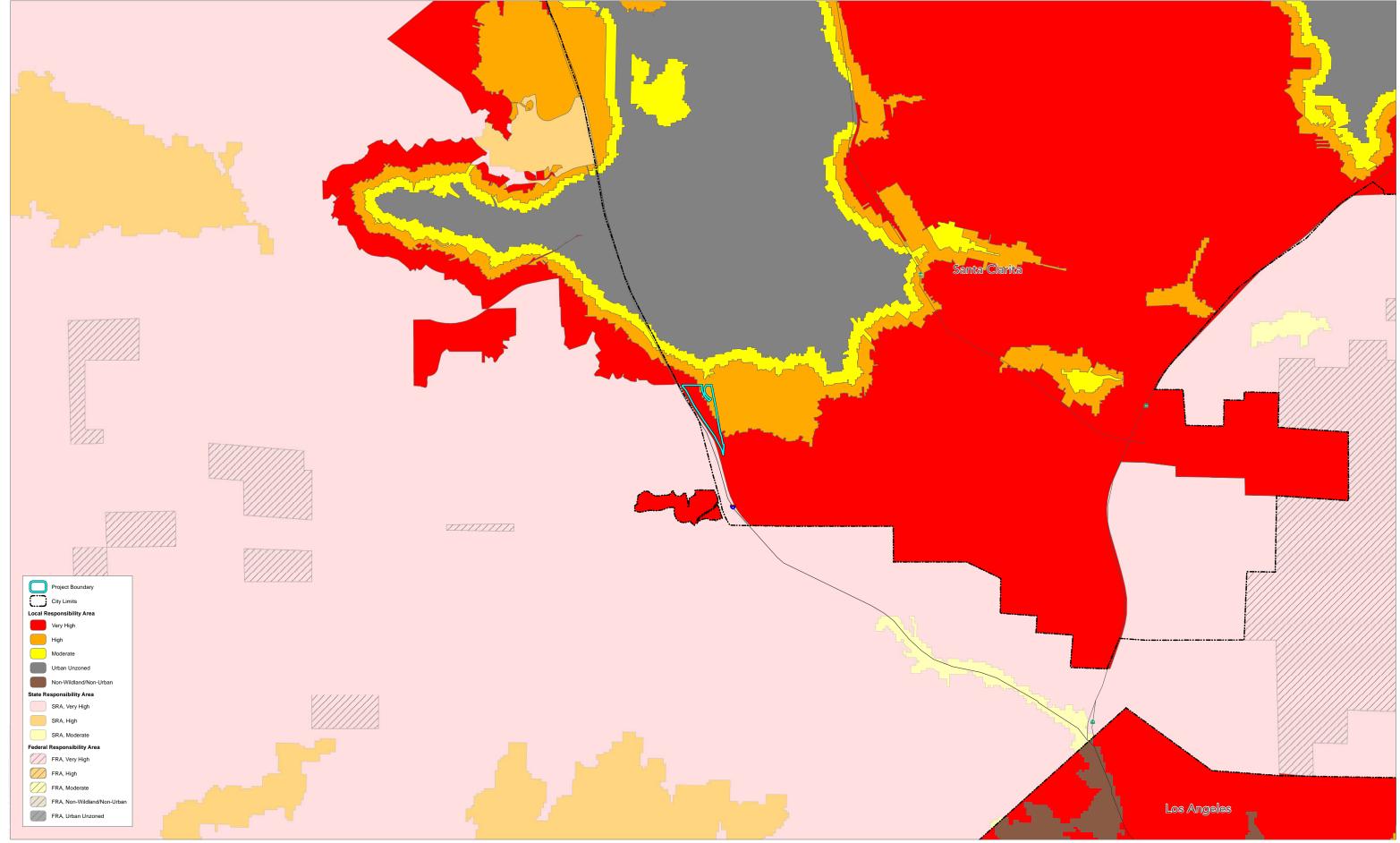
4.19.8 References Cited

- CAL FIRE (California Department of Forestry and Fire Protection). 2011. Fire Hazard Severity Zone Maps. September 2011. Accessed January 2024. https://osfm.fire.ca.gov/what-we-do/community-wildfire-preparedness-and-mitigation/fire-hazard-severity-zones/fire-hazard-severity-zones-maps.
- CAL FIRE. 2019. 2019 Strategic Plan. https://www.paperturn-view.com/cal-fire-communications/strategicplan2019-final?pid=MjU253660
- CAL FIRE. 2022. Historic Fire Perimeters. April 2023. Accessed January 2024. https://www.fire.ca.gov/what-we-do/fire-resource-assessment-program/fire-perimeters
- City of Santa Clarita. 2011. City of Santa Clarita General Plan. June 2011. https://www.codepublishing.com/CA/SantaClarita/html/SantaClaritaGP/SantaClaritaGP.html
- City of Santa Clarita. 2023. City of Santa Clarita Fire Code. March 2023. https://www.codepublishing.com/CA/SantaClarita/#!/SantaClarita22/SantaClarita22.html
- County of Los Angeles. N.d.. *Fuel Modification Plant Selection Guideline*. Accessed January 2024. https://fire.lacounty.gov/wp-content/uploads/2022/02/Plant-Selection-Guidelines_10.2021.pdf
- County of Los Angeles. 2022. Los Angeles County Fire Department 2022 Statistical Summary. Accessed January 2024. https://fire.lacounty.gov/wp-content/uploads/2023/07/2022-Statistical-SummaryFINAL.pdf
- County of Los Angeles. 2023a. Los Angeles County Fire Department 2023 Fire Plan. June 27, 2023. https://www.osfm.fire.ca.gov/media/a0wjlazf/2023-los-angeles-county-unit-fire-plan.pdf
- County of Los Angeles. 2023b. Los Angeles County Fire Code. November 16, 2023. https://library.municode.com/ca/los_angeles_county/codes/code_of_ordinances?nodeld=TIT32FIC0

- County of Los Angeles. 2023c. County of Los Angeles Operational Area Emergency Operations Plan.

 November 2023. https://ceo.lacounty.gov/wp-content/uploads/2023/11/County-of-Los-Angeles-OAEOP-2023-Final-for-Website.pdf
- DOI/USDA (United States Department of the Interior/United States Department of Agriculture). 2000. *Managing the Impact of Wildfires on Communities and the Environment*. https://www.forestsandrangelands.gov/documents/resources/reports/2001/8-20-en.pdf.
- International Code Council. 2020a. 2021 International Fire Code. October 30, 2020.
- International Code Council. 2020b. 2021 International Wildland-Urban Interface Code. August 17, 2020.
- Moench, R. and Fusaro, J., 2012. Soil Erosion Control after Wildfire: Factsheet No. 6.308, Colorado State University Extension, Fort Collins, CO "Electronic document.
- National Wildfire Coordinating Group. 2009. *Guidance for Implementation of Federal Wildland Fire Management Policy*. February 13, 2009.
- NFPA. 2024. List of Codes and Standards. Accessed January 2024. https://www.nfpa.org/en/For-Professionals/Codes-and-Standards/List-of-Codes-and-Standards
- Thompson, A. & Livescience. 2017. Why the Ventura Wildfire Is So Explosive. Scientific American.

 December 6, 2017. Accessed February 2024. https://www.scientificamerican.com/article/why-the-ventura-wildfire-is-so-explosive/
- SCE (Southern California Edison). 2019. DeRiM Web Map. Accessed, November 22, 2022. https://drpep.sce.com/drpep/.
- Syphard, A.D., Bar Massada, A., Butsic, V. and Keeley, J.E., 2013. Land use planning and wildfire: development policies influence future probability of housing loss. PloS one, 8(8), p.e71708.
- Weather Spark. 2024. Climate and Average Weather Year Round in Santa Clarita. Accessed January 2024. https://weatherspark.com/y/1726/Average-Weather-in-Santa-Clarita-California-United-States-Year-Round.
- WRCC (Western Regional Climate Center). 2024. Saugus California Wind Rose Climatology. Accessed January 2024. https://wrcc.dri.edu/cgi-bin/rawMAIN.pl?caCSAU.

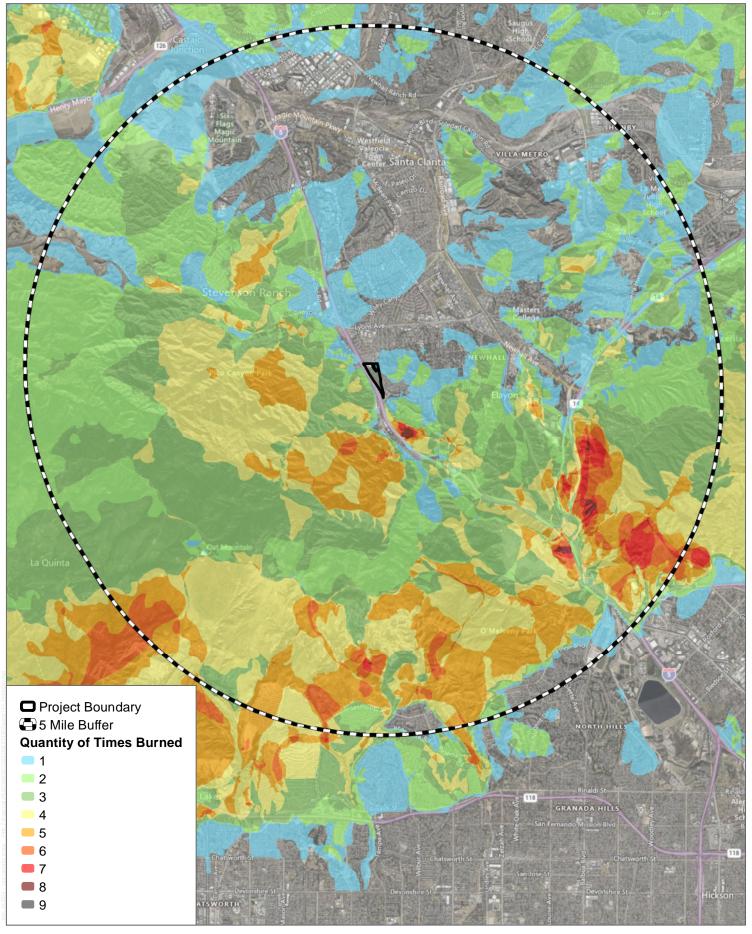


SOURCE: CalFire 2006

DUDEK ♠ 0 1,500 3,000 Feet

FIGURE 4.19-1

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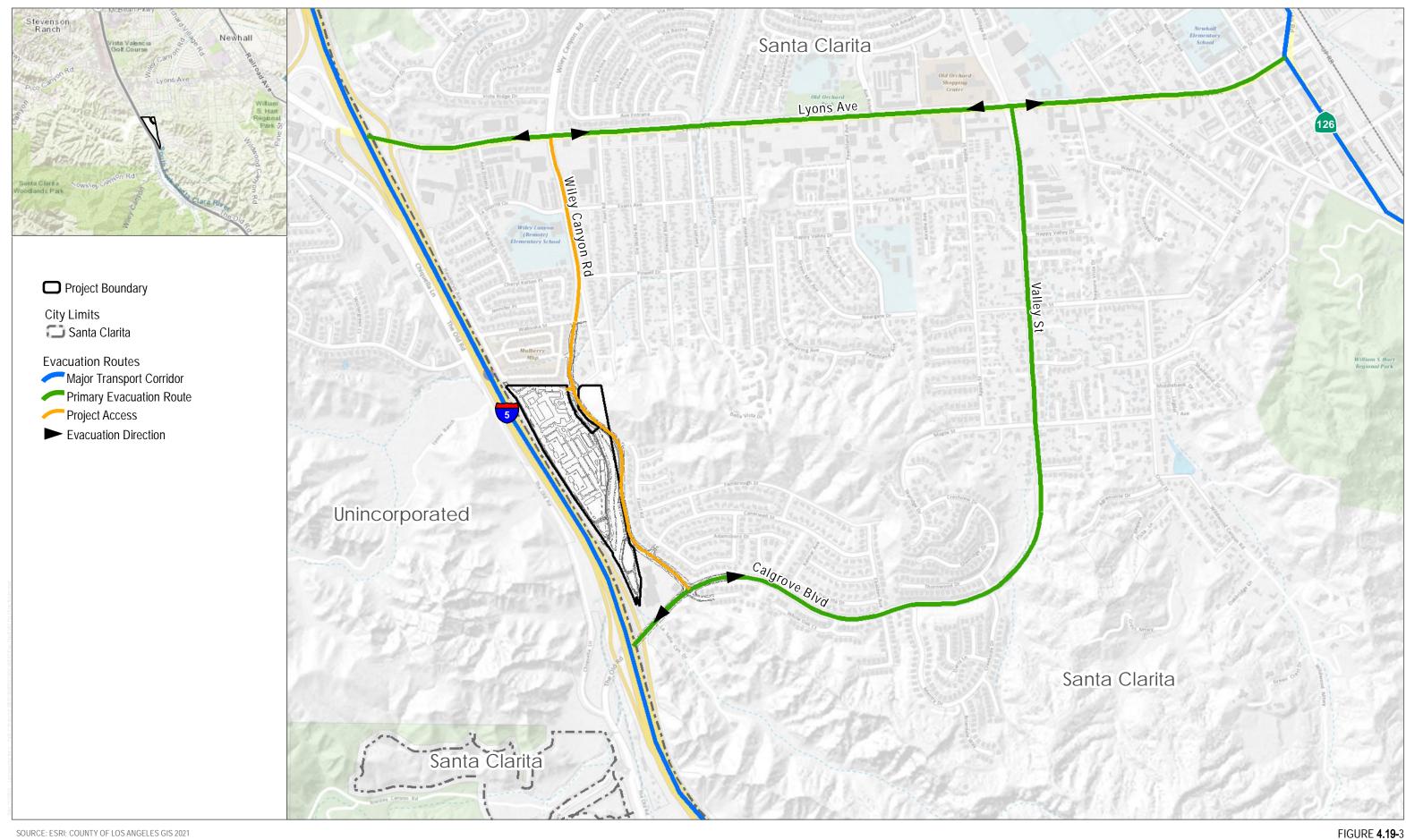


SOURCE: Bing Imagery 2023, CalFire 2021



FIGURE 4.19-2
Fire History
Wiley Canyon Project

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DUDEK 6 0 500 1,000 Feet

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SOURCE: Oakridge Landscape INC. 2021, Studio PAD Landscape Architecture 2021

FIGURE 4.19-4A
Responsibility Areas
Wiley Canyon Project

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SOURCE: Oakridge Landscape INC. 2021, Studio PAD Landscape Architecture 2021



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5 Other CEQA Considerations

This chapter discusses other issues for which the California Environmental Quality Act (CEQA) requires analysis in addition to the specific issue areas discussed in Chapter 4, Environmental Impact Analysis. These additional issues include (1) effects found not to be significant, (2) significant effects that cannot be avoided, (3) significant irreversible environmental changes that would be caused by the proposed Wiley Canyon Project (project) should it be implemented, and (4) growth-inducing impacts.

5.1 Effects Found Not to Be Significant

CEQA Guidelines Section 15128 requires that an Environmental Impact Report (EIR) contain a statement indicating the reasons why various possible significant effects of a project were determined not to be significant and were therefore not discussed in detail in the EIR. Given the nature of the proposed project, location of the project site, and current uses of the project site, the following issue areas were not discussed in detail in the EIR. As such, below are statements indicating the reasons why the proposed project would not result in significant impacts to agricultural resources.

5.1.1 Agricultural Resources

The project site is currently mostly vacant, is designated as Mixed Use – Neighborhood (MX-N) in the City's General Plan that is also within a Planned Development Overlay (PD) zone. Although the project site previously supported agricultural uses, no agricultural activities or resources exist on the project site, and the site is not zoned for such activities. The Farmland Mapping and Monitoring Program designates the project site as Grazing Land, which is defined as land on which the existing vegetation is suited to the grazing of livestock (Department of Conservation 2016a). Moreover, the project site's vicinity is surrounded by land designated as Grazing Land and Urban and Built-Up Land, which is defined as land occupied by structures with a building density of at least 1 unit to 1.5 acres, or approximately 6 structures to a 10-acre parcel. The project site does not maintain an existing Williamson Act contract (Department of Conservation 2016b). Additionally, the project site nor the surrounding area contain forestland or timberland. As such, implementation of the proposed project would not result in impacts to agricultural resources.

5.2 Significant and Unavoidable Environmental Effects

CEQA Guidelines Section 15126.2(c) requires an EIR to identify significant environmental effects that cannot be avoided if a project is implemented. As discussed in Chapter 4 of this EIR, implementation of the project would result in significant impacts to construction noise and vibration. Project implementation would also result in cumulative impacts to construction noise and vibration. Where significant impacts were identified for other issues, mitigation measures were developed that would reduce those impacts to less than significant.

5.2.1 Noise (Temporary or Permanent Increase in Ambient Noise Levels)

Under Threshold NOI-1, the project has the potential to result in the generation of a substantial temporary and permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the City of Santa Clarita's General Plan (City of Santa Clarita 2011) or noise regulations. Construction noise impacts from the project's construction activities would remain significant and unavoidable even with implementation of mitigation measures MM-NOI-1 and MM-NOI-2, which would limit construction equipment within 200 feet of the northern and eastern boundary of the project site and would implement construction noise barriers, respectively. Nonetheless, even with implementation of mitigation, construction noise impacts would remain significant and unavoidable.

5.3 Significant Irreversible Environmental Effects

CEQA Guidelines Section 15126.2(d) requires evaluation of the following:

Uses of nonrenewable resources during the initial and continued phases of the project [that] may be irreversible since a large commitment of such resources makes removal or non-use thereafter unlikely. Primary impacts and, particularly, secondary impacts (such as a highway 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.

Generally, a project would result in significant irreversible environmental changes if any of the following would occur:

- 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;
- The primary and secondary impacts of the project would generally commit future generations of people to similar uses;
- Irreversible damage from environmental accidents associated with the project;
- The proposed consumption of resources is not justified (e.g., the project results in wasteful use of energy).

Determining whether the Project could result in significant and irreversible effects requires a determination of whether key resources would be degraded or destroyed in such a way that there would be little possibility of restoring them.

Approval of the project would result in or contribute to the following irreversible environmental changes:

• Alteration of the human environment as a result of development of the project site with 379 new residences, a new senior living facility, associated amenities, and commercial space. The project would irreversibly alter the previously undeveloped portions of the project site's approximately 31.8 acres of land designated as Mixed Use – Neighborhood (MX-N) that is also within a Planned Development Overlay (PD) zone. This would constitute a permanent change. Once construction occurs, reversal of the land to its original condition is highly unlikely.

- Increased requirements of public services and utilities by the project, representing a permanent commitment of these resources. Service providers have adequate supply of resources to serve the project (see Section 4.13, Public Services, and Section 4.16, Utilities and Service Systems).
- Use of various new raw materials, such as lumber and forest products, metals (such as iron and steel), sand and gravel, asphalt, petrochemicals, and other materials for construction. Some of these resources are already being depleted worldwide. The energy consumed in developing and maintaining the site may be considered a permanent investment that would incrementally reduce existing supplies of fossil fuels, natural gas, and gasoline (see Section 4.5, Energy).

5.4 Growth-Inducing Impacts

CEQA Guidelines Section 15126.2(e) requires a discussion of how the potential growth-inducing impacts of a project could foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment. Induced growth is distinguished from the direct employment, population, and/or housing growth of a project. If a project has characteristics that "may encourage and facilitate other activities that could significantly affect the environment, either individually or cumulatively," then these aspects of a project must be discussed. Induced growth is any growth that exceeds planned growth and results from new development that would not have taken place in the absence of that project. Typically, the growth-inducing potential of a project would be considered significant if it stimulates population growth or a population concentration above what is assumed in local and regional land use plans, or in projections made by regional planning authorities, such as the Southern California Association of Governments (SCAG).

CEQA Guidelines section 15126.2 also indicate that growth should not be assumed to be either beneficial or detrimental. A project may foster economic or population growth, or additional housing, either indirectly or directly, in a geographical area if it meets any one of the following criteria:

- The project would remove obstacles to population growth.
- Increases in the population may tax existing community service facilities, causing significant environmental effects.
- The project would encourage and facilitate other activities that could significantly affect the environment.

The project would result in the creation of six separate lots and the redevelopment of an existing vacant land with a new mixed-use development consisting of a 277,108 square-foot senior living facility, 8,914 square feet of commercial space, 379 multifamily residential apartments, a publicly accessible outdoor recreational field space, and off-site circulation improvements (e.g., new roundabouts, traffic signals, Class I and II bike lanes on Wiley Canyon Road and Calgrove Boulevard, and pedestrian trails).

The project proposes new residential units and therefore would result in a direct increase in population of approximately 1,371 people. The project would provide a range of commercial services in the City. The project would also require approximately 90 additional employees between the commercial space and senior living facility to serve the project at buildout. However, developing the new residences and senior living facility would not necessarily generate an increase in residential population from employment needs, as employees would likely come from within the City itself. Indirectly, the project could result in an added attractive community asset that is currently not in existence and add additional jobs to the area. However, the project is not expected to result in population or employment growth above City General Plan forecasts, as discussed below.

According to the One Valley One Vision General Plan, the City is expected to undergo an increase of 128,850 jobs, and have a buildout of approximately 286,254 total jobs by 2030. The increase of 90 employees at full buildout of the project would represent approximately 0.7% of the anticipated increase in the number of jobs within the City according to the One Valley One Vision General Plan for 2030. Therefore, the project would not stimulate population growth or a population concentration above what is assumed in local and regional land use plans, or in projections made by regional planning authorities.

Indirect growth can also occur by a project installing infrastructure that can support further growth. The project site is adequately served by existing public services and utilities, and no new utilities would be needed to serve the project. Therefore, indirect growth inducement as a result of the extension of these facilities into a new area would not occur.

Overall, the project would stimulate population growth through the addition of new residences and thus new residents, as well as through new employees. However, the growth would be consistent with employment growth envisioned in local and regional land use plans and in projections made by regional planning authorities because the planned growth of the project site and its land use intensity have been factored into the underlying growth projections of the One Valley One Vision General Plan.

5.5 References Cited

City of Santa Clarita. 2011. *City of Santa Clarita General Plan, Conservation and Open Space Element*. Adopted June 2011. Accessed January 2024. https://www.codepublishing.com/CA/SantaClarita/html/SantaClaritaGP/6%20-%20Conservation%20and%20Open%20Space%20Element.pdf.

Department of Conservation. 2016a. California Important Farmland Finder. Dated 2016. Accessed October 2022. https://maps.conservation.ca.gov/DLRP/CIFF/.

Department of Conservation. 2016b. Los Angeles County Williamson Act FY 2015/2016. [map]. 1:120,000. Sacramento, CA: California Department of Conservation, Division of Land Resource Protection. 2016. Accessed October 2022. http://www.conservation.ca.gov/dlrp/wa/Pages/stats_reports.aspx.

6 Alternatives

6.1 Introduction

Pursuant to the California Environmental Quality Act (CEQA) Guidelines, an Environmental Impact Report (EIR) is required to "describe a range of reasonable alternatives to the project, or to the location of the project, which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project and evaluate the comparative merits of the alternatives. An EIR need not consider every conceivable alternative to a project" (CEQA Guidelines section 15126.6[a]). An EIR "must consider a reasonable range of potentially feasible alternatives that will foster informed decision making and public participation" (Id.). This alternatives discussion is required even if these alternatives "would impede to some degree the attainment of the project objectives or would be more costly" (Id.).

The CEQA Guidelines further provide that the range of alternatives is guided by a "rule of reason," such that only those alternatives necessary to permit a reasoned choice are included (CEQA Guidelines section 15126.6[f]). The EIR need only examine alternatives that could feasibly attain most of the basic objectives of the project. Per CEQA Guidelines section 15126.6(c), "Among the factors that may be taken into account when addressing 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."

The inclusion of an alternative in an EIR does not constitute definitive evidence that the alternative is in fact "feasible." The final decision regarding the feasibility of alternatives lies with the decision maker for a given project, who must make the necessary findings addressing the potential feasibility of an alternative, including whether it meets most of the basic project objectives or reduces the severity of significant environmental effects pursuant to CEQA (Public Resources Code Section 21081; see also CEQA Guidelines section 15091).

Beyond these factors, the CEQA Guidelines require the analysis of a "no project" alternative and an evaluation of alternative location(s) for the project, if feasible. Based on the alternatives analysis, an environmentally superior alternative is to be designated. If the environmentally superior alternative is the "no project" alternative, then the EIR shall identify an environmental superior alternative among the other alternatives.

6.2 Project Objectives

In developing the alternatives to be addressed in this chapter, consideration was given to the ability to meet the basic objectives of the proposed Wiley Canyon Project (project) and eliminate or substantially reduce the identified significant environmental impacts. As stated in Chapter 3, Project Description, of this Draft EIR, the project objectives against which the alternatives were analyzed include the following:

- Create a new mixed-use community that allows for residential, retail/commercial, and senior housing while preserving and enhancing natural resources.
- Provide a sensitive and protective interface with the adjacent Wiley Canyon Creek by utilizing appropriate setback, grading, landscape, buried bank stabilization and water quality treatments.

- Provide development and transitional land use patterns that are compatible with surrounding communities and land uses and are consistent with the City's General Plan.
- Arrange land uses and add amenities to reduce vehicle miles traveled and to encourage the use
 of transit.
- Design neighborhoods to locate residential and non-residential land uses in close proximity to each other and major road corridors, transit and trails.
- Provide public spaces, including plazas, private and public recreational areas and trails.
- Implement waste reduction, drought-tolerant landscaping, and use of water efficiency measures.
- Provide a meandering trail with public access along Wiley Canyon Road and within the project site along Wiley Canyon Creek.
- Provide a landscape design emphasizing a pleasant neighborhood character and inviting streetscapes.
- Enhance and augment the City's housing market by providing a variety of housing product to meet the needs of future residents.
- Maintain and enhance the use of Wiley Canyon Creek with native revegetation as a to serve as a natural channel to be utilized by wildlife.
- Incorporate new oak trees into the project design, including public spaces.
- Incorporate vehicle and pedestrian circulation improvements on Wiley Canyon Road and Calgrove Boulevard through the widening of the roadways where needed, as well as the addition of appropriate traffic controls at various intersections.
- Provide a Class I trail and sidewalks along the roadways.
- Provide publicly accessible passive and active recreational opportunities for prospective residents and existing residents in proximity to the project site.
- Include amenities to specifically support senior residents requiring senior services including memory care, supporting amenities for basic-needs nursing care, and housekeeping service.
- Include recreational amenities to improve quality of life of prospective on-site residents and existing offsite residents and encourage senior living tenants to socialize and maintain active lifestyles.

6.3 Alternatives Considered but Rejected

As set forth in CEQA Guidelines section 15126.6(c), an EIR should identify any alternatives that were considered for analysis but rejected as infeasible and briefly explain the reasons for rejection. According to the CEQA Guidelines, among the factors that may be used to eliminate an alternative from detailed consideration are the alternative's failure to meet most of the basic project objectives, the alternative's infeasibility, or the alternative's inability to avoid significant environmental impacts. The following discussion presents an alternative to the project that were considered but rejected. This alternative is not discussed in further detail and has been eliminated from further consideration.

6.3.1 Alternative Site

Pursuant to CEQA Guidelines Section 15126.6(f)(2), the City considered the potential for alternative locations to the Project. As stated in CEQA Guidelines section 15126.6(f)(2)(A), the key question and first step in analyzing alternative sites is whether any of the significant effects of a project would be avoided or substantially lessened

by putting that project in another location. Only locations that would avoid or substantially lessen any of the significant effects of a project need to be considered in the EIR.

The project would result in significant and unavoidable impacts related to construction noise even with the incorporation of mitigation measures MM-NOI-1 and MM-NOI-2, as detailed in Section 4.12, Noise, of this Draft EIR. Similarly, the project would result in cumulatively considerable construction noise impacts. In particular, a significant impact would occur as a result of a temporary exceedance in the ambient noise thresholds during construction, as well as an exceedance in significance thresholds related to the proposed Senior Living residences on site. There are no significant and unavoidable impacts associated with the proposed project that relate to the location of the project site, and development of the project on another site in the City is not likely to lessen or avoid the environmental impacts that required mitigation. Moreover, the objectives of the proposed project are closely tied to redeveloping the former Smiser Mule Ranch. Consideration of the potential to development the proposed project on another site within the City was given. The surrounding vicinity is characterized as urban and suburban development, vacant land, which has been previously disturbed by past agricultural activities, and limited commercial uses. Underutilized developed areas would have the potential to be redeveloped to provide additional housing units, however, the project applicant does not control another site within the area of comparable land that is available for development of the project.

Given the site's location, site zoning, and site designations for development, it is also not reasonable to assume that the use of another site would result in the project site being vacant and impacts related to the site conditions avoided. Other surrounding areas are also in other jurisdictions outside the control of the City. Development of the proposed project on an alternate site would result in a similar construction scenario, similar quantities of criteria air pollutant emissions during construction, similar levels of construction noise, and similar levels of energy consumption. Additionally, because of the City's urban nature, mix of land uses, and the presence of a variety of sensitive receptors throughout the City, it is unlikely that an alternate site would be situated far enough from sensitive receptors to substantially lessen the air quality and noise impacts of the proposed project during construction.

Regardless of its location, the proposed project would generally place similar demands on public services, utilities and services systems, and energy resources. With regard to the visibility and appearance of the project, the aesthetic impact on the project is largely related to its height and density, which would not substantially change at an alternative location.

For these reasons, this alternative was eliminated from further consideration.

6.4 Alternatives Under Consideration

This section discusses the alternatives to the project, including the No Project Alternative, under consideration. The No Project/No Build Alternative, which is a required element of an EIR pursuant to CEQA Guidelines section 15126.6(e), examines the environmental effects that would occur if the project were not to proceed and no development activities were to occur. The other alternatives are discussed as part of the "reasonable range of alternatives" selected by the lead agency. The following alternatives are addressed in this section, followed by a more detailed discussion of each:

- Alternative 1 No Project/No Build Alternative
- Alternative 2 Affordable Housing Alternative

- Alternative 3 Private Recreational Facility Alternative
- Alternative 4 Construction Noise Setback Alternative

6.4.1 Alternative 1 - No Project/No Build Alternative

CEQA Guidelines Section 15126.6(e) requires that an EIR evaluate the specific alternative of "no project" along with its impact. As stated in this section of the CEQA Guidelines, the purpose of describing and analyzing a no project alternative is to allow decision makers to compare the impacts of approving a proposed project with the impacts of not approving a proposed project. The following passage from CEQA Guidelines Section 15126.6(e)(3)(B) examines the circumstances under which the project does not proceed:

"Here the discussion would compare the environmental effects of the property remaining in its existing state against environmental effects which would occur if the project is approved. If disapproval of the project under consideration would result in predictable actions by others, such as the proposal of some other project, this "no project" consequence should be discussed. In certain instances, the no project alternative means "no build" wherein the existing environmental setting is maintained. However, where failure to proceed with the project will not result in preservation of existing environmental conditions, the analysis should identify the practical result of the project's non-approval and not create and analyze a set of artificial assumptions that would be required to preserve the existing physical environment."

The City's General Plan identified the project site and surrounding land uses (e.g., commercial development to the south) as Special Development Areas. Moreover, the General Plan designates the project site as Mixed Use – Neighborhood (MX-N) and assumed specific buildout scenarios. Given this, the project site's vacant condition (or preservation of existing conditions) is unlikely to remain due to the land use designation for the project site and its vicinity. However, in the event the proposed project is not approved, this alternative cannot create and analyze a set of artificial assumptions in which some other project is proposed. Therefore, Alternative 1 assumes the existing conditions at the time the notice of preparation was published (March 2022) would not occur as discussed in Chapter 3 of this Draft EIR. The existing vacant condition as the former Smiser Mule Ranch would remain.

6.4.1.1 Environmental Impact Analysis

Aesthetics

As discussed in Section 4.1, Aesthetics, of this EIR, implementation of the proposed project would result in less-than-significant scenic vista, scenic resources, visual character, and nighttime light and glare impacts. No mitigation measures are required.

Under Alternative 1, no new development would occur on the project site. As such, because no changes to visual character would occur and no new nighttime lighting would be added to the site, aesthetic impacts under Alternative 1 would be **less than** those anticipated from the proposed project.

Air Quality

As discussed in Section 4.2, Air Quality, of this EIR, implementation of the proposed project would not result in conflicts with an adopted air quality management plan, would not exceed established thresholds for criteria air

pollutants during construction or operation, and, with implementation of mitigation (MM-AQ-1), would not expose sensitive receptors to pollutant concentrations during construction. All air quality impacts can be mitigated to a less-than-significant level.

Under Alternative 1, no new development would occur on the project site. As such, this alternative would not result in any construction emissions associated with construction worker and construction truck traffic, or the use of heavy-duty construction equipment. During operations, this alternative would remain in the current condition, whereas the proposed project would generate operational emissions of criteria pollutants. Given this, air quality impacts under Alternative 1 would be **less than** those anticipated from the proposed project.

Biological Resources

As discussed in Section 4.3, Biological Resources, of this EIR, with implementation of mitigation measures MM-BIO-1 through MM-BIO-3, impacts to special-status wildlife species (e.g., least Bell's vireo, Cooper's hawk) would be less than significant. Similarly, with implementation of mitigation measure MM-BIO-4, impacts to riparian and sensitive plant communities to less than significant. MM-BIO-5 would reduce impacts to protected waters to less than significant.

Under Alternative 1, no new development would occur on the project site. Because the site would remain undeveloped, biological resources within the vicinity of the South Fork of the Santa Clara River would not be affected. As such, under Alternative 1, overall impacts to biological resources would be **less than** when compared to the proposed project.

Cultural and Tribal Cultural Resources

As discussed in Section 4.4, Cultural Resources, of this EIR, impacts to historical resources and archaeological resources would be less than significant with the implementation of mitigation measures MM-CUL-1, MM-CUL-2, MM-CUL-3, and MM-CUL-4. Similarly, impacts to human remains would be less than significant with mitigation measure MM-CUL-5 incorporated.

As discussed in Section 4.17, Tribal Cultural Resources, of this EIR, impacts to tribal cultural resources would be less than significant with implementation of mitigation.

Under Alternative 1, no new development would occur on the project site. Because the site would remain undeveloped, and because no earthwork would be required, the potential for disturbing any historic, archaeological, or tribal cultural resources, as well as human remains, would not occur. As such, impacts related to cultural and tribal cultural resources under Alternative 1 would be **less than** the proposed project.

Energy

As discussed in Section 4.5, Energy, of this EIR, energy impacts associated with the proposed project would be less than significant, and no mitigation is required.

Under Alternative 1, no new development would occur on the project site. Because the site would remain undeveloped, energy consumption would not occur. Impacts to energy under Alternative 1 would be **less than** the proposed project.

Geology and Soils

As discussed in Section 4.6, Geology and Soils, of this EIR, impacts related to geology and soils were found to be less than significant without mitigation. However, given that there are fossil localities nearby the project site from the same sedimentary deposits that occur on site, mitigation (MM-GEO-1 through MM-GEO-4) was required to reduce impacts to paleontological resources to less-than-significant levels.

Under Alternative 1, no new development would occur on the project site. Because the site would remain undeveloped, no new structures would be built on site, and no earthwork would be required, no impacts related to geology and soils and paleontological resources would occur. As such, impacts related to geology and soils under Alternative 1 would be **less than** the proposed project.

Greenhouse Gas Emissions

As discussed in Section 4.7, Greenhouse Gas Emissions, of this EIR, all greenhouse gas (GHG) emission impacts would be less than significant, and no mitigation is required.

Under Alternative 1, no new development would occur on the project site. As such, construction impacts would not occur, and operational GHG impacts would not be generated. Given this, GHG impacts would be **less than** the proposed project under Alternative 1.

Hazards and Hazardous Materials

As discussed in Section 4.8, Hazards and Hazardous Materials, of this EIR, potential impacts associated with hazards and hazardous materials would be less than significant. However, there is the potential for impacts associated with the potential exposure of people or structures to risk of loss, injury, or death involving wildland fires. With implementation of mitigation measures MM-FIRE-1 through MM-FIRE-3, impacts would be reduced to less-than-significant levels.

Under Alternative 1, no new development would occur on the project site. Under this no build alternative, impacts related to hazardous materials would not occur. Moreover, impacts related to construction wildland risk would not occur. Similarly, operational risk impacts related to wildland fires would not occur. Given this, impacts related to hazards and hazardous materials would be **less than** the proposed project under Alternative 1.

Hydrology and Water Quality

As discussed in Section 4.9, Hydrology and Water Quality, of this EIR, impacts related hydrology and water quality would be less than significant. However, impacts related to the project's potential to impede or redirect flood flows would be less than significant with the incorporation of MM-HYD-1. Similarly, impacts related to flood hazards would require implementation of MM-HYD-1 to reduce to less-than-significant levels.

Under Alternative 1, no new development would occur on the project site. As such, construction impacts would not occur. Alternative 1 would not result in changes to the project site, such as grading, paving, or construction of new structures. As such, under this alternative impacts related to flood control patterns would not occur. Therefore, Alternative 1 would result in impacts that are **less than** the proposed project.

Land Use and Planning

As discussed in Section 4.10, Land Use and Planning, of this EIR, land use and planning impacts would be potentially significant associated with the impacts outlined throughout this EIR (i.e., MM-AQ-1, MM-BIO-1 through MM-BIO-5, MM-HYD-1, MM-NOI-1 and MM-NOI-2, and MM-FIRE-1 through MM-FIRE-3). As such, in order to ensure consistency between the proposed project and applicable land use plans, policies, and regulations that have been adopted for the purpose of avoiding or mitigating an environmental effect to the maximum extent feasible, mitigation measures have been incorporated to reduce impacts to less-than-significant levels.

Under Alternative 1, no new development would occur on the project site. Given that Alternative 1 would not result in changes to the project site, impacts related to land use and planning would be **less than** the proposed project.

Mineral Resources

As discussed in Section 4.11, Mineral Resources, of this EIR, impacts would be less than significant due to the lack of any known significant mineral resources.

Under Alternative 1, no new development would occur. Under existing conditions, the project site does not contain existing mineral resource extraction activities or existing oil wells. Because Alternative 1 would not change the existing conditions of the project site, this alternative would result in **similar** impacts when compared the proposed project.

Noise

As discussed in Section 4.12, Noise, of this EIR, construction noise and construction vibration would result in significant impacts that cannot be mitigated to a less-than-significant level. However, these impacts would be short term and limited to construction activities. The project would result in significant and unavoidable impacts related to construction noise even with the incorporation of mitigation measures MM-NOI-1 and MM-NOI-2, as detailed in Section 4.12, Noise, of this Draft EIR. Similarly, the project would result in cumulatively considerable construction noise impacts. In particular, a significant impact would occur as a result of a temporary exceedance in the ambient noise thresholds during construction, as well as an exceedance in significance thresholds related to the proposed Senior Living residences on site. Operational noise and vibration impacts associated specifically with the project would be less than significant and would not require mitigation.

Under Alternative 1, no new development would occur on the project site. As such, construction impacts would not occur. Because construction noise impacts would be considered significant and unavoidable under the proposed project, and because Alternative 1 would result in no project, this alternative would reduce and avoid these significant impacts. During operations, impacts would not occur as a result of the no-build alternative. Given this, noise and vibration impacts under Alternative 1 would be less than the proposed project and would eliminate significant and unavoidable impacts.

Population and Housing

As discussed in Section 4.13, Population and Housing, impacts related to population and housing would be less than significant, and no mitigation is required. The proposed project does not include the displacement of any people, housing, or businesses, nor would the proposed development induce population growth. Construction

employment at the project site is not anticipated to generate population growth in the City. During operation, total employment is estimated to be filled by City residents or by residents of neighboring cities or communities.

Under Alternative 1, no new development would occur on the project site. As such, no construction or operational impacts would occur. Given this, impacts related to population and housing under Alternative 1 would be **less** than the proposed project.

Public Services

As discussed in Section 4.14, Public Services, of this Draft EIR, impacts related to police, fire, schools, parks, and other public services (libraries) would be less than significant, and no mitigation is required.

Under Alternative 1, no new development would occur on the project site. As such, the no-build alternative would result in no construction or operational impacts to public services. Given this, impacts related to public services under Alternative 1 would be **less than** the proposed project.

Recreation

As discussed in Section 4.15, Recreation, of this Draft EIR, impacts related to recreation would be less than significant with implementation of all mitigation measures required for all other environmental issue areas. The proposed project includes recreational components, which would result in construction and operational impacts. The construction noise impacts would be temporary in nature and attributed to the entire project, not just the recreational component.

Under Alternative 1, no new development would occur on the project site. As such, construction and operational impacts would not occur. Given this, impacts related to recreational facilities under Alternative 1 would be less than the proposed project.

Transportation

As discussed in Section 4.16, Transportation, of this EIR, the proposed project would generate approximately 3,696 average daily trips (ADT), with 210 trips occurring during the AM peak hour and 307 trips occurring during the PM peak hour before accounting for the internal capture of trips between uses and existing trips currently passing by the project site. Table 6-1, below, details the proposed project's trip generation by land use. The vehicle miles traveled (VMT) analysis demonstrated that the proposed project's VMT per resident and VMT per employee are below the threshold, and would result in a less than significant impacts. Moreover, no hazardous geometric design features would be part of the project's roadway improvements and the project would not result in inadequate emergency access. Therefore, impacts would be less than significant.

Under Alternative 1, no new development would occur on the project site. As such, construction and operational transportation impacts would not occur. Given this, transportation impacts under Alternative 1 would be **less than** the proposed project.

Table 6-1. Proposed Project Trip Generation

Land Use	Amount	Units	Average Daily Trips
Multifamily Housing Low-Rise (220)	379	DU	2,554
Commercial Shopping Center	8.9	TSF	606

Table 6-1. Proposed Project Trip Generation

Land Use	Amount	Units	Average Daily Trips
Senior Living Facilities/CCRC	217	Units	536
Total Gross Trips 3,696			3,696
Total External Trips 3,548			3,548
Net New External Trips 3,488		3,488	

Source: See Table 4.16-3 within Section 4.16, Transportation of this Draft EIR for more details.

Utilities and Service Systems

As discussed in Section 4.18, Utilities and Service Systems, of this Draft EIR, impacts related to water, wastewater, solid waste, storm water, electricity, telecommunications, and natural gas would be less than significant, and no mitigation is required.

Under Alternative 1, no new development would occur on the project site. As such, construction and operational impacts related to utilities and service systems would not occur. Given this, impacts to utilities and service systems under Alternative 1 would be **less than** the proposed project.

Wildfire

As discussed in Section 4.19, with implementation of mitigation measures MM-FIRE-1 through MM-FIRE-3, potential impacts associated with wildfires would be less than significant.

Under Alternative 1, no new development would occur on the project site. As such, construction and operational impacts related to wildfires would not occur. Given this, wildfire impacts under Alternative 1 would be **less than** the proposed project.

6.4.1.2 Relationship to Project Objectives

Under Alternative 1, no new development would occur on the project site. Table 6-2 provides a list of the project objectives and whether Alternative 1 meets each objective.

Table 6-2. Summary of Alternative 1 Success at Meeting Project Objectives

Proj	ect Objective	Alternative Meets Objective?
1.	Create a new mixed-use community that allows for residential, retail/commercial, and senior housing while preserving and enhancing natural resources.	No . Under Alternative 1, no new development would occur on the project site. The existing condition would remain. As such, Alternative 1 would not meet this project objective.
2.	Provide a sensitive and protective interface with the adjacent Wiley Canyon Creek by utilizing appropriate setback, grading, landscape, buried bank stabilization and water quality treatments.	No. Under Alternative 1, no new development would occur on the project site. The existing condition would remain. As such, Alternative 1 would not meet this project objective.
3.	Provide development and transitional land use patterns that are compatible with surrounding communities and land uses and are consistent with the City's General Plan.	No . Under Alternative 1, no new development would occur on the project site. The existing condition would remain. As such, Alternative 1 would not meet this project objective.

Table 6-2. Summary of Alternative 1 Success at Meeting Project Objectives

Droi	ect Objective	Alternative Meets Objective?
-		-
4.	Arrange land uses and add amenities to reduce vehicle miles traveled and to encourage the use of transit.	No. Under Alternative 1, no new development would occur on the project site. The existing condition would remain. As such, Alternative 1 would not meet this project objective.
5.	Design neighborhoods to locate residential and non-residential land uses in close proximity to each other and major road corridors, transit and trails.	No. Under Alternative 1, no new development would occur on the project site. The existing condition would remain. As such, Alternative 1 would not meet this project objective.
6.	Provide public spaces, including plazas, private and public recreational areas and trails.	No. Under Alternative 1, no new development would occur on the project site. The existing condition would remain. As such, Alternative 1 would not meet this project objective.
7.	Implement waste reduction, drought-tolerant landscaping, and use of water efficiency measures.	No . Under Alternative 1, no new development would occur on the project site. The existing condition would remain. As such, Alternative 1 would not meet this project objective.
8.	Provide a meandering trail with public access along Wiley Canyon Road and within the project site along Wiley Canyon Creek.	No. Under Alternative 1, no new development would occur on the project site. The existing condition would remain. As such, Alternative 1 would not meet this project objective.
9.	Provide a landscape design emphasizing a pleasant neighborhood character and inviting streetscapes.	No. Under Alternative 1, no new development would occur on the project site. The existing condition would remain. As such, Alternative 1 would not meet this project objective.
10	Enhance and augment the City's housing market by providing a variety of housing product to meet the needs of future residents.	No. Under Alternative 1, no new development would occur on the project site. The existing condition would remain. As such, Alternative 1 would not meet this project objective.
11	. Maintain and enhance the use of Wiley Canyon Creek with native revegetation as a to serve as a natural channel to be utilized by wildlife.	No. Under Alternative 1, no new development would occur on the project site. The existing condition would remain. As such, Alternative 1 would not meet this project objective.
12	. Incorporate new oak trees into the project design, including public spaces.	No . Under Alternative 1, no new development would occur on the project site. The existing condition would remain. As such, Alternative 1 would not meet this project objective.
13	Incorporate vehicle and pedestrian circulation improvements on Wiley Canyon Road and Calgrove Boulevard through the widening of the roadways where needed, as well as the addition of appropriate traffic controls at various intersections.	No . Under Alternative 1, no new development would occur on the project site. The existing condition would remain. As such, Alternative 1 would not meet this project objective.
14	. Provide a Class I trail and sidewalks along the roadways.	No. Under Alternative 1, no new development would occur on the project site. The existing condition would remain. As such, Alternative 1 would not meet this project objective.
15	Provide publicly accessible passive and active recreational opportunities for prospective residents and existing residents in proximity to the project site.	No. Under Alternative 1, no new development would occur on the project site. The existing condition would remain. As such, Alternative 1 would not meet this project objective.
16	Include amenities to specifically support senior residents requiring senior services including memory care, supporting amenities for basic-needs nursing care, and housekeeping service.	No . Under Alternative 1, no new development would occur on the project site. The existing condition would remain. As such, Alternative 1 would not meet this project objective.

Table 6-2. Summary of Alternative 1 Success at Meeting Project Objectives

Project Objective	Alternative Meets Objective?
17. Include recreational amenities to improve quality of life of prospective on-site residents and existing off-site residents and encourage senior living tenants to socialize and maintain active lifestyles.	No. Under Alternative 1, no new development would occur on the project site. The existing condition would remain. As such, Alternative 1 would not meet this project objective.

6.4.2 Alternative 2 - Affordable Housing Alternative

This alternative includes development of the project site with 837 apartment units, including 201 units designated for low- and very-low-income households. The maximum height of the proposed buildings would be 65 feet under this alternative. The proposed floor-area-ratio for this alternative is 0.63. Under Alternative 2, a total of 1,026 parking spaces would be provided, in compliance with State Density Bonus requirements. In comparison to the proposed project, the recreational areas located on the southern portion of the project site would not be developed under this alternative. As shown in Figure 6-1, Alternative 2 Site Plan, the infrastructure improvements, including the northern water quality basin and the southern drainage basin on site are proposed under this alternative. In addition, off-site street improvements along Wiley Canyon Road and its intersecting streets, including Fourl Road, Canerwell Street, Valley Oak Court, and Calgrove Boulevard would remain.

6.4.2.1 Environmental Impact Analysis

Aesthetics

As discussed in Section 4.1, Aesthetics, of this EIR, implementation of the proposed project would result in less-than-significant scenic vista, scenic resources, visual character, and nighttime light and glare impacts. No mitigation measures are required.

Under Alternative 2, multifamily residential is proposed throughout the project site. As shown in Figure 6-1, Alternative 2 Site Plan, the proposed apartment buildings would be 3- to 4-stories in height, with a majority of the 4-story buildings publicly visible from the east looking at the project site. Impacts related to scenic vistas and scenic resources within a state scenic highway would be the same as the proposed project. Moreover, although setbacks and other barriers (e.g., the proposed berm along the creek) are proposed, 4-story buildings would be publicly visible from Wiley Canyon Road from the northeast. The proposed residential is an allowable use on the project site and subject to the same regulations governing scenic quality and lighting and glare as the proposed project. Therefore, impacts related to aesthetics under Alternative 2 would be **similar to** the proposed project.

Air Quality

As discussed in Section 4.2, Air Quality, of this EIR, implementation of the proposed project would not result in conflicts with an adopted air quality management plan, would not exceed established thresholds for criteria air pollutants during construction or operation, and, with implementation of mitigation (MM-AQ-1), would not expose sensitive receptors to pollutant concentrations during construction. All air quality impacts can be mitigated to a less-than-significant level.

Under Alternative 2, construction and operational activities are anticipated to be similar to the proposed project. The proposed land uses on site under this alternative are allowed under the City's General Plan and zoning designation. As such, implementation of Alternative 2 would not result in a conflict with the AQMP. Construction of Alternative 2 would require similar equipment and activities as the proposed project. Given this, it is anticipated mitigation would be required to reduce mobile source emissions, such as NOx, which are generated from the use of construction equipment such as dozers and loaders. Similar to the proposed project, MM-AQ-1 would be required to reduce impacts to less-than-significant levels. Additionally, with similar construction activities, Alternative 2 is anticipated to require mitigation (i.e., MM-AQ-1) to reduce construction-related toxic air contaminants to less-than-significant levels. Therefore, air quality impacts under Alternative 2 would be **similar to** the proposed project.

Biological Resources

As discussed in Section 4.3, Biological Resources, of this EIR, with implementation of mitigation measures MM-BIO-1 through MM-BIO-3, impacts to special-status wildlife species (i.e., least Bell's vireo, Cooper's hawk) would be less than significant. Similarly, with implementation of mitigation measure MM-BIO-4, impacts to riparian and sensitive plant communities to less than significant. MM-BIO-5 would reduce impacts to protected waters to less than significant.

Under Alternative 2, future development would have the same development footprint as the proposed project. Therefore, all impacts related to biological resources under the proposed project would occur under this alternative. Mitigation measures MM-BIO-1 through MM-BIO-5 would be necessary to reduce impacts to less-than-significant levels. Therefore, impacts to biological resources under Alternative 2 would be **similar to** the proposed project.

Cultural and Tribal Cultural Resources

As discussed in Section 4.4, Cultural Resources, of this EIR, impacts to historical resources and archaeological resources would be less than significant with the implementation of mitigation measures MM-CUL-1, MM-CUL-2, MM-CUL-3, and MM-CUL-4. Similarly, impacts to human remains would be less than significant with mitigation measure MM-CUL-5 incorporated.

As discussed in Section 4.17, Tribal Cultural Resources, of this EIR, impacts to tribal cultural resources would be less than significant with implementation of mitigation.

Under Alternative 2, future development would have the same development footprint as the proposed project. Therefore, all impacts related to cultural resources under the proposed project would occur under this alternative. Mitigation measures MM-CUL-1 through MM-CUL-5 would be necessary to reduce impacts to less-than-significant levels. Therefore, impacts to cultural resources under Alternative 2 would be **similar to** the proposed project.

Energy

As discussed in Section 4.5, Energy, of this EIR, energy impacts associated with the proposed project would be less than significant, and no mitigation is required.

Under Alternative 2, it is anticipated that the land use mix proposed would result in an increase in energy use during construction and operation when compared to the proposed project. However, similar to the proposed

project, this alternative would be required to comply with applicable regulations governing energy efficiency. As such, it is anticipated Alternative 2 would result in a less than significant impact regarding wasteful, inefficient, or unnecessary consumption of energy resources. Additionally, Alternative 2 would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency and would result in a less than significant impact, consistent with the Project. Therefore, energy-related impacts under Alternative 2 would be **similar to** the proposed project.

Geology and Soils

As discussed in Section 4.6, Geology and Soils, of this EIR, impacts related to geology and soils were found to be less than significant without mitigation. However, given that there are fossil localities nearby the project site from the same sedimentary deposits that occur on site, mitigation (MM-GEO-1 through MM-GEO-4) was required to reduce impacts to paleontological resources to less-than-significant levels.

Under Alternative 2, future development would have the same development footprint as the proposed project. Compliance building code regulations would reduce impacts related to geology and soils, consistent with the proposed project. Additionally, given the project site's sensitivity for fossil localities nearby, MM-GEO-1 through MM-GEO-4 would be required under Alternative 2 to reduce impacts to less than significant. Therefore, it is likely that impacts related to geology and soils under Alternative 2 would be **the same as** the proposed project.

Greenhouse Gas Emissions

As discussed in Section 4.7, Greenhouse Gas Emissions, of this EIR, all GHG emission impacts would be less than significant, and no mitigation is required.

Under Alternative 2, the construction scenario would be similar to the proposed project and generate similar construction-related GHG emissions. During operations, an increase in vehicle trips is anticipated as a result of the proposed land use. Given this, Alternative 2 is anticipated to result GHG impacts **slightly greater than** the proposed project.

Hazards and Hazardous Materials

As discussed in Section 4.8, Hazards and Hazardous Materials, of this EIR, potential impacts associated with hazards and hazardous materials would be less than significant. However, there is the potential for impacts associated with the potential exposure of people or structures to risk of loss, injury, or death involving wildland fires. With implementation of mitigation measures MM-FIRE-1 through MM-FIRE-3, impacts would be reduced to less-than-significant levels.

Under Alternative 2, future development would have the same development footprint as the proposed project. Impacts are anticipated to be the same as the proposed project. Additionally, mitigation measures MM-FIRE-1 through MM-FIRE-3 would be required under this alternative to reduce impacts associated with the potential exposure of people or structures to risk of loss, injury, or death involving wildland fires. Given this, impacts related to hazards and hazardous materials under Alternative 2 would be **the same as** the proposed project.

Hydrology and Water Quality

As discussed in Section 4.9, Hydrology and Water Quality, of this EIR, impacts related hydrology and water quality would be less than significant. However, impacts related to the project's potential to impede or redirect flood flows would be less than significant with the incorporation of MM-HYD-1. Similarly, impacts related to flood hazards would require implementation of MM-HYD-1 to reduce to less-than-significant levels.

Under Alternative 2, future development would have the same development footprint as the proposed project. The alternative would require the same on- and off-site improvements to the South Fork of the Santa Clara River. As such, impacts related to flood hazards would require implementation of MM-HYD-1 to reduce to less-than-significant levels under Alternative 2. Given this, impacts related to hydrology and water quality under Alternative 2 would be **the same as** the proposed project.

Land Use and Planning

As discussed in Section 4.10, Land Use and Planning, of this EIR, land use and planning impacts would be potentially significant associated with the impacts outlined throughout this EIR (i.e., MM-AQ-1, MM-BIO-1 through MM-BIO-5, MM-HYD-1, MM-NOI-1 and MM-NOI-2, and MM-FIRE-1 through MM-FIRE-3). As such, in order to ensure consistency between the proposed project and applicable land use plans, policies, and regulations that have been adopted for the purpose of avoiding or mitigating an environmental effect to the maximum extent feasible, mitigation measures have been incorporated to reduce impacts to less-than-significant levels.

Under Alternative 2, future development would have the same development footprint as the proposed project, however it exceeds the maximum number of residential units allowed under the General Plan for the Calgrove Corridor/Smiser Ranch area. The proposed land uses on site under this alternative are allowed under the City's General Plan and zoning designation, but in compliance with the State Density Bonus law, this alternative could exceed the development limitations for floor area and number of residential units established under the General Plan for the Calgrove Corridor/Smiser Ranch area. Therefore, similar to the proposed project, mitigation measures identified throughout the Draft EIR would be incorporated to reduce impacts to less-than-significant levels. Given this, impacts related to land use and planning under Alternative 2 would be **the same as** the proposed project.

Mineral Resources

As discussed in Section 4.11, Mineral Resources, of this EIR, impacts would be less than significant due to the lack of any known significant mineral resources.

Under Alternative 2, future development would have the same development footprint as the proposed project. Mineral extraction activities do not occur on site under existing conditions. As such, Alternative 2 would not result in the loss of availability of a known mineral resource. Impacts to mineral resources under Alternative 2 would be the same as the proposed project.

Noise

As discussed in Section 4.12, Noise, of this EIR, construction noise and construction vibration would result in significant impacts that cannot be mitigated to a less-than-significant level. However, these impacts would be short-term and limited to construction activities. The project would result in significant and unavoidable impacts related to construction noise even with the incorporation of mitigation measures MM-NOI-1 and MM-NOI-2. Similarly,

the project would result in cumulatively considerable construction noise impacts. In particular, a significant impact would occur as a result of a temporary exceedance in the ambient noise thresholds during construction, as well as an exceedance in significance thresholds related to the proposed Senior Living residences on site. Operational noise and vibration impacts associated specifically with the project would be less than significant and would not require mitigation.

Under Alternative 2, future development would have the same development footprint as the proposed project. As such, it is anticipated that construction-related impacts would be remain significant and unavoidable even with MM-NOI-1 and MM-NOI-2 incorporated. However, as detailed in Section 4.12 of this EIR, significant noise-related impacts would occur during construction due to the phasing of the proposed project and proximity of the proposed Senior Living residences on site. Under Alternative 2, only multifamily residences are proposed; however, construction phasing is anticipated to be similar to the proposed project. For these reasons, impacts related to noise and vibration would be **similar to** the proposed project and significant and unavoidable impacts would remain under Alternative 2.

Population and Housing

As discussed in Section 4.13, Population and Housing, impacts related to population and housing would be less than significant, and no mitigation is required. The proposed project does not include the displacement of any people, housing, or businesses, nor would the proposed development induce population growth. Construction employment at the project site is not anticipated to generate population growth in the City. During operation, total employment is estimated to be filled by City residents or by residents of neighboring cities or communities.

Under Alternative 2, 837 multifamily residential units are proposed on the project site. Utilizing the City's average persons per household of 3.08 (as identified in Section 4.13 of this EIR), this alternative is anticipated to result in approximately 2,578 residents. The population projections under Alternative 2, therefore, would be greater than the 1,371 residents anticipated under the proposed project. Although the alternative would generate increased housing and population growth when compared to the proposed project, the additional units and associated residents would result in a nominal contribution to the City and Santa Clarita Valley's projected population of 485,000 by 2030. Less than significant impacts are anticipated under Alternative 2. Therefore, impacts related to population and housing would be **greater than** the proposed project.

Public Services

As discussed in Section 4.14, Public Services, of this Draft EIR, impacts related to police, fire, schools, parks, and other public services (libraries) would be less than significant, and no mitigation is required.

Under Alternative 2, an increase in population is anticipated when compared to the proposed project (see the discussion above regarding population and housing). Given this, the alternative is anticipated to result in an increased demand for police, fire, schools, parks, and other public services (libraries). However, due to the overall nominal contribution to population projections, impacts are anticipated to remain less than significant. Therefore, impacts under Alternative 2 would be **greater than** the proposed project.

Recreation

As discussed in Section 4.15, Recreation, of this Draft EIR, impacts related to recreation would be less than significant with implementation of all mitigation measures required for all other environmental issue areas. The

^{837*3.08 = 2577.95} or 2,578 (rounded to the nearest whole person)

proposed project includes recreational components, which would result in construction and operational impacts. The construction noise impacts would be temporary in nature and attributed to the entire project, not just the recreational component.

Under Alternative 2, recreational amenities proposed under the proposed project are not included. Given the anticipated increase in population under this alternative, an increase in the use of existing neighborhood and regional parks or other recreational facilities would likely occur. Due to the lack of recreational amenities on site as compared to the proposed project, impacts as a result of Alternative 2 would be **greater than** the proposed project.

Transportation

As discussed in Section 4.16, Transportation, of this EIR, the proposed project would generate approximately 3,696 ADT, with 210 trips occurring during the AM peak hour and 307 trips occurring during the PM peak hour before accounting for the internal capture of trips between uses and existing trips currently passing by the project site. The vehicle miles traveled (VMT) analysis demonstrated that the proposed project's VMT per resident and VMT per employee are below the threshold, and would result in a less than significant impacts. Moreover, no hazardous geometric design features would be part of the project's roadway improvements and the project would not result in inadequate emergency access. Therefore, impacts would be less than significant.

Under Alternative 2, similar less-than-significant impacts would occur relative to geometric design features or emergency access. The proposed design under this alternative is similar to the proposed project, in which the same off-site street improvements are proposed as the proposed project. Table 6-3 compares the trip generation of the proposed project with Alternative 2. As shown, Alternative 2 is expected to generate approximately 3,800 average daily trips, or 312 additional vehicle trips when compared to the proposed project. Given this, the impacts associated with Alternative 2 are anticipated to be **slightly greater than** the proposed project.

Table 6-3. Alternative 2 vs. Proposed Project Trip Generation Comparison

Land Use	Amount	Units	Average Daily Trips
Proposed Project			
Multifamily Housing Low-Rise (220)	379	DU	2,554
Commercial Shopping Center	8.9	TSF	606
Senior Living Facilities/CCRC	217	Units	536
	Total	Gross Trips	3,696
	Total Ex	ternal Trips	3,548
Net New External 1	Trips (Total Propo	sed Project)	3,488
Alternative 2			
Apartments (Multifamily Mid-Rise)	837	DU	3,800
Total Alternative 2 Trips			3,800
Comparison between Alternative 2 and Proposed Project			312

Source: Stantec 2023.

Utilities and Service Systems

As discussed in Section 4.18, Utilities and Service Systems, of this Draft EIR, impacts related to water, wastewater, solid waste, storm water, electricity, telecommunications, and natural gas would be less than significant, and no mitigation is required.

Under Alternative 2, future development would have the same development footprint as the proposed project. Connections to utilities and service systems to the project site would remain. However, due to the potential increase in population generated as a result of 837 multifamily residential units, an increase in demand for potable water, electric power, natural gas, and telecommunications is anticipated. Similarly, an increase in the generation of solid waste and wastewater is expected. The City's General Plan anticipated the residential land use proposed under this alternative. As such, Alternative 2 is consistent with the land use designation and zoning. Given this, infrastructure planning for the project site considered the potential development of this alternative. Therefore, impacts are anticipated to remain less than significant. However, impacts as a result of Alternative 2 would be **slightly greater than** the proposed project.

Wildfire

As discussed in Section 4.19, with implementation of mitigation measures MM-FIRE-1 through MM-FIRE-3, potential impacts associated with wildfires would be less than significant.

Under Alternative 2, future development would have the same development footprint as the proposed project. As detailed in Section 4.19 of this EIR, the project site lies within an area considered a Very High Fire Hazard Severity Zone (VHFHSZ) within the Local Responsibility Area (LRA) as designated by CAL FIRE and the Los Angeles County Fire Department. There is also an expansive area of VHFHSZ State Responsibility Area (SRA) west of the project site on the other side of I-5 freeway. Given the existing conditions and the development footprint of this alternative, mitigation measures MM-FIRE-1 through MM-FIRE-3 would be required to reduce impacts to less-than-significant levels. Therefore, impacts related to wildfire would be **similar to** the proposed project.

6.4.2.2 Relationship to Project Objectives

Under Alternative 2, 837 apartment units, including 201 units designated for low- and very-low-income households are proposed on the project site. As shown in Figure 6-1, Alternative 2 Site Plan, the on- and off-site infrastructure improvements would remain. However, the recreational areas included under proposed project would not be developed under this alternative. Table 6-4 provides a list of the project objectives and whether Alternative 2 meets each objective.

Table 6-4. Summary of Alternative 2 Success at Meeting Project Objectives

Project Objective	Alternative Meets Objective?
 Create a new mixed-use community that allows for residential, retail/commercial, and senior housing while preserving and enhancing natural resources. 	Partially Yes. Under Alternative 2, only multifamily residential is proposed when compared to the proposed project. This alternative would not develop Lot 6 of the project site, as described in Chapter 3, Project Description, of this EIR. As such, Alternative 2 would partially meet this objective.

Table 6-4. Summary of Alternative 2 Success at Meeting Project Objectives

Proje	ect Objective	Alternative Meets Objective?
2.	Provide a sensitive and protective interface with the adjacent Wiley Canyon Creek by utilizing appropriate setback, grading, landscape, buried bank stabilization and water quality treatments.	Yes. Under Alternative 2, a 5-foot earth berm would be constructed on the site's western border along the Wiley Canyon Creek (also referred to as the South Fork of the Santa Clara River). Setbacks, grading, and landscaping would be the same as the proposed project. As shown in Figure 6-1, Alternative 2 Site Plan, a water quality basin is proposed on north portion of the site and a drainage basin is proposed to the south. As such, Alternative 2 would meet this objective.
3.	Provide development and transitional land use patterns that are compatible with surrounding communities and land uses and are consistent with the City's General Plan.	Yes. Alternative 2 is an allowable use under the City's General Plan and zoning designation Mixed Use – Neighborhood (MX-N) with a Planned Development Overlay (PD). As such, Alternative 2 would meet this objective.
4.	Arrange land uses and add amenities to reduce vehicle miles traveled and to encourage the use of transit.	Partially Yes. Alternative 2 would not result in the same recreational amenities as the proposed project. However, this alternative would include an on-site pool and recreational building to support the 837 multifamily residences. Given this, Alternative 2 would partially meet this objective.
5.	Design neighborhoods to locate residential and non-residential land uses in close proximity to each other and major road corridors, transit and trails.	Yes. The proposed land uses under Alternative 2 would be primarily residential on the project site. Given this, the alternative would result in residential land use in close proximity to surrounding residential land uses. As such, Alternative 2 would meet this objective.
6.	Provide public spaces, including plazas, private and public recreational areas and trails.	Partially Yes. Alternative 2 would include private recreational uses on site for residents. See similar discussion under Objective No. 4. Given this, Alternative 2 would partially meet this objective.
7.	Implement waste reduction, drought-tolerant landscaping, and use of water efficiency measures.	Yes. Alternative 2 would be required to comply with all applicable landscaping and water efficiency measures under the City's Municipal Code. Given this, Alternative 2 would meet this objective.
8.	Provide a meandering trail with public access along Wiley Canyon Road and within the project site along Wiley Canyon Creek.	Yes. Under Alternative 2, similar improvements along the South Fork of the Santa Clara River (i.e., Wiley Canyon Creek) is proposed. Given this, Alternative 2 would meet this objective.
9.	Provide a landscape design emphasizing a pleasant neighborhood character and inviting streetscapes.	Yes. See similar discussion under Objective No. 7.
10.	Enhance and augment the City's housing market by providing a variety of housing product to meet the needs of future residents.	Yes. Under Alternative 2, 837 apartment units, including 201 units designated for low- and very-low-income households are proposed on the project site. Given this, Alternative 2 would meet this objective.
11.	Maintain and enhance the use of Wiley Canyon Creek with native revegetation as a to serve as a natural channel to be utilized by wildlife.	Yes. See similar discussion under Objective No. 8.
12.	Incorporate new oak trees into the project design, including public spaces.	Yes. See similar discussion under Objective No. 7.

Table 6-4. Summary of Alternative 2 Success at Meeting Project Objectives

Project Objective	Alternative Meets Objective?
13. Incorporate vehicle and pedestrian circulation improvements on Wiley Canyon Road and Calgrove Boulevard through the widening of the roadways where needed, as well as the addition of appropriate traffic controls at various intersections.	Yes. Under Alternative 2, similar improvements along Wiley Canyon Road are proposed as shown in Figure 6-1. Given this, Alternative 2 would meet this objective.
14. Provide a Class I trail and sidewalks along the roadways.	Yes. See similar discussion under Objective No. 8.
15. Provide publicly accessible passive and active recreational opportunities for prospective residents and existing residents in proximity to the project site.	Partially Yes. See similar discussion under Objective No. 4.
16. Include amenities to specifically support senior residents requiring senior services including memory care, supporting amenities for basic-needs nursing care, and housekeeping service.	No. Alternative 2 does not include senior living residential on the project site. As such, this alternative would not meet this objective.
17. Include recreational amenities to improve quality of life of prospective on-site residents and existing off-site residents and encourage senior living tenants to socialize and maintain active lifestyles.	Partially Yes. See similar discussion under Objective No. 4 and Objective No. 16.

6.4.3 Alternative 3 - Private Recreational Facility Alternative

This alternative includes the development of a private recreational facility, which would include various recreational uses along with a 10,000 square foot clubhouse/restaurant. Development under this alternative would consist of eight tennis courts, seven pickleball courts, a soccer field, a football field, baseball field and outdoor basketball court. All courts and fields would include overhead lighting. Under Alternative 3, parking would be included to support the recreational facility. In addition, on-site infrastructure improvements along the creek off-site street improvements would be included, as shown in Figure 6-2, Alternative 3 Site Plan.

6.4.3.1 Environmental Impact Analysis

Aesthetics

As discussed in Section 4.1, Aesthetics, of this EIR, implementation of the proposed project would result in less-than-significant scenic vista, scenic resources, visual character, and nighttime light and glare impacts. No mitigation measures are required.

Under Alternative 3, a private recreational facility is proposed on the project site. As shown in Figure 6-2, Alternative 3 Site Plan, no buildings/structures are proposed on site with the exception of a 10,000-square foot restaurant bar/clubhouse located on the northwest portion of the site. Publicly accessibly views could show the tennis courts to the north. Views along Wiley Canyon Road may be obstructed by the earth berm and/or vegetation along the creek. Impacts related to scenic vistas and scenic resources within a state scenic highway

would be the same as the proposed project. Implementation of this alternative would be subject to the same regulations governing scenic quality and lighting and glare as the proposed project. However, given that the recreational facility would require overhead lighting, impacts related to lighting and glare would be greater than the proposed project. Therefore, impacts related to aesthetics under Alternative 2 would be **greater than** the proposed project.

Air Quality

As discussed in Section 4.2, Air Quality, of this EIR, implementation of the proposed project would not result in conflicts with an adopted air quality management plan, would not exceed established thresholds for criteria air pollutants during construction or operation, and, with implementation of mitigation (MM-AQ-1), would not expose sensitive receptors to pollutant concentrations during construction. All air quality impacts can be mitigated to a less-than-significant level.

Under Alternative 3, a private recreational facility is proposed on the project site. The proposed land uses on site under this alternative are allowed under the City's General Plan and zoning designation. Implementation of Alternative 3 would not result in a conflict with the AQMP. Alternative 3 would require typical construction equipment and activities as the proposed project. Given this, it is anticipated mitigation would be required to reduce mobile source emissions, such as NO_X, which are generated from the use of construction equipment such as dozers and loaders. Similar to the proposed project, MM-AQ-1 would be required to reduce impacts to less-than-significant levels. Additionally, with similar construction activities, Alternative 3 is anticipated to require mitigation (i.e., MM-AQ-1) to reduce construction-related toxic air contaminants to less-than-significant levels. Moreover, the scale of the proposed development under this alternative is less in comparison to the proposed project (as detailed under Transportation, in which the alternative would result in over 2,000 fewer daily trips). For these reasons, air quality impacts under Alternative 4 would be **less than** the proposed project.

Biological Resources

As discussed in Section 4.3, Biological Resources, of this EIR, with implementation of mitigation measures MM-BIO-1 through MM-BIO-3, impacts to special-status wildlife species (e.g., least Bell's vireo, Cooper's hawk) would be less than significant. Similarly, with implementation of mitigation measure MM-BIO-4, impacts to riparian and sensitive plant communities to less than significant. MM-BIO-5 would reduce impacts to protected waters to less than significant.

Under Alternative 3, future development would have a similar footprint as the proposed project. However, the potential impacts associated with the South Fork of the Santa Clara River would remain under this alternative. Therefore, all impacts related to biological resources under the proposed project would occur under Alternative 3 and mitigation measures MM-BIO-1 through MM-BIO-5 would be necessary to reduce impacts to less-than-significant levels. Therefore, impacts to biological resources under Alternative 3 would be **similar to** the proposed project.

Cultural and Tribal Cultural Resources

As discussed in Section 4.4, Cultural Resources, of this EIR, impacts to historical resources and archaeological resources would be less than significant with the implementation of mitigation measures MM-CUL-1, MM-CUL-2, MM-CUL-3, and MM-CUL-4. Similarly, impacts to human remains would be less than significant with mitigation measure MM-CUL-5 incorporated.

As discussed in Section 4.17, Tribal Cultural Resources, of this EIR, impacts to tribal cultural resources would be less than significant with implementation of mitigation.

Under Alternative 3, future development would have a similar footprint as the proposed project. As detailed in Section 4.4, there is potential for unknown cultural resources to be encountered during project implementation on site. As such, all impacts related to cultural resources under the proposed project would occur under this alternative. Mitigation measures MM-CUL-1 through MM-CUL-5 would be necessary to reduce impacts to less-than-significant levels. Therefore, impacts to cultural resources under Alternative 3 would be **similar to** the proposed project.

Energy

As discussed in Section 4.5, Energy, of this EIR, energy impacts associated with the proposed project would be less than significant, and no mitigation is required.

Under Alternative 3, it is anticipated that the proposed private recreational facility would result in less energy use during construction and operation when compared to the proposed project. Similar to the proposed project, this alternative would be required to comply with applicable regulations governing energy efficiency. As such, it is anticipated Alternative 3 would result in a less than significant impact regarding wasteful, inefficient, or unnecessary consumption of energy resources. Additionally, Alternative 3 would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency and would result in a less than significant impact, consistent with the Project. Therefore, energy-related impacts under Alternative 3 would be **less than** the proposed project.

Geology and Soils

As discussed in Section 4.6, Geology and Soils, of this EIR, impacts related to geology and soils were found to be less than significant without mitigation. However, given that there are fossil localities nearby the project site from the same sedimentary deposits that occur on site, mitigation (MM-GEO-1 through MM-GEO-4) was required to reduce impacts to paleontological resources to less-than-significant levels.

Under Alternative 3, future development would have a similar footprint as the proposed project. Compliance building code regulations would reduce impacts related to geology and soils, consistent with the proposed project. However, given the project site's sensitivity for fossil localities nearby, MM-GEO-1 through MM-GEO-4 would be required under Alternative 3 to reduce impacts to less than significant. Therefore, it is likely that impacts related to geology and soils under Alternative 3 would be **the same as** the proposed project.

Greenhouse Gas Emissions

As discussed in Section 4.7, Greenhouse Gas Emissions, of this EIR, all greenhouse gas (GHG) emission impacts would be less than significant, and no mitigation is required.

Under Alternative 3, the construction scenario would be less than to the proposed project and generate less construction-related GHG emissions. During operations, a reduction in vehicle trips is anticipated as a result of Alternative 3 (See the discussion under Transportation for more details). Given this, GHG impacts under Alternative 3 are anticipated to be **less than** the proposed project.

Hazards and Hazardous Materials

As discussed in Section 4.8, Hazards and Hazardous Materials, of this EIR, potential impacts associated with hazards and hazardous materials would be less than significant. However, there is the potential for impacts associated with the potential exposure of people or structures to risk of loss, injury, or death involving wildland fires. With implementation of mitigation measures MM-FIRE-1 through MM-FIRE-3, impacts would be reduced to less-than-significant levels.

Under Alternative 3, future development would have a similar footprint as the proposed project. Impacts related to hazards and hazardous materials are anticipated to be the same as the proposed project. Additionally, mitigation measures MM-FIRE-1 through MM-FIRE-3 would be required under this alternative to reduce site-specific impacts associated with the potential exposure of people or structures to risk of loss, injury, or death involving wildland fires. Given this, impacts related to hazards and hazardous materials under Alternative 3 would be **the same as** the proposed project.

Hydrology and Water Quality

As discussed in Section 4.9, Hydrology and Water Quality, of this EIR, impacts related hydrology and water quality would be less than significant. However, impacts related to the project's potential to impede or redirect flood flows would be less than significant with the incorporation of MM-HYD-1. Similarly, impacts related to flood hazards would require implementation of MM-HYD-1 to reduce to less-than-significant levels.

Under Alternative 3, future development would have a similar footprint as the proposed project. Although development could result in more pervious surfaces when compared to the proposed project, this alternative would require the same on- and off-site improvements to the South Fork of the Santa Clara River. As such, impacts related to flood hazards would require implementation of MM-HYD-1 to reduce to less-than-significant levels under Alternative 3. Given this, impacts related to hydrology and water quality under Alternative 3 would be the same as the proposed project.

Land Use and Planning

As discussed in Section 4.10, Land Use and Planning, of this EIR, land use and planning impacts would be potentially significant associated with the impacts outlined throughout this EIR (i.e., MM-AQ-1, MM-BIO-1 through MM-BIO-5, MM-HYD-1, MM-NOI-1 and MM-NOI-2, and MM-FIRE-1 through MM-FIRE-3). As such, in order to ensure consistency between the proposed project and applicable land use plans, policies, and regulations that have been adopted for the purpose of avoiding or mitigating an environmental effect to the maximum extent feasible, mitigation measures have been incorporated to reduce impacts to less-than-significant levels.

Under Alternative 3, future development would have a similar footprint as the proposed project. Moreover, the proposed land use under this alternative are allowed under the City's General Plan and zoning designation. Therefore, similar to the proposed project, mitigation measures identified throughout the Draft EIR would be incorporated to reduce impacts to less-than-significant levels. Given this, impacts related to land use and planning under Alternative 3 would be **the same as** the proposed project.

Mineral Resources

As discussed in Section 4.11, Mineral Resources, of this EIR, impacts would be less than significant due to the lack of any known significant mineral resources.

Under Alternative 3, future development would have a similar footprint as the proposed project. However, mineral extraction activities do not occur on site under existing conditions. As such, Alternative 3 would not result in the loss of availability of a known mineral resource. Site-specific impacts to mineral resources under Alternative 3 would be **the same as** the proposed project.

Noise

As discussed in Section 4.12, Noise, of this EIR, construction noise and construction vibration would result in significant impacts that cannot be mitigated to a less-than-significant level. However, these impacts would be short term and limited to construction activities. The project would result in significant and unavoidable impacts related to construction noise even with the incorporation of mitigation measures MM-NOI-1 and MM-NOI-2, as detailed in Section 4.12, Noise, of this Draft EIR. Similarly, the project would result in cumulatively considerable construction noise impacts. In particular, a significant impact would occur as a result of a temporary exceedance in the ambient noise thresholds during construction, as well as an exceedance in significance thresholds related to the proposed Senior Living residences on site. Operational noise and vibration impacts associated specifically with the project would be less than significant and would not require mitigation.

Under Alternative 3, future development would have a similar footprint as the proposed project. As such, there is still the potential for construction noise to affect adjacent noise-sensitive receptors to the north and east. Alternative 3 would require the incorporation of MM-NOI-1 and MM-NOI-2 to reduce impacts. However, construction phasing is anticipated to be similar to the proposed project. For these reasons, impacts related to noise and vibration would be **similar to** the proposed project and **significant and unavoidable impacts would remain** under Alternative 3.

Population and Housing

As discussed in Section 4.13, Population and Housing, impacts related to population and housing would be less than significant, and no mitigation is required. The proposed project does not include the displacement of any people, housing, or businesses, nor would the proposed development induce population growth. Construction employment at the project site is not anticipated to generate population growth in the City. During operation, total employment is estimated to be filled by City residents or by residents of neighboring cities or communities.

Under Alternative 3, a private recreational facility is proposed on the project site. As such, this alternative would not generate a population growth as a result of housing units, such as the proposed project. However, Alternative 3 would result in employment growth generated from the proposed 10,000 square-foot restaurant bar/clubhouse. Under the proposed project, approximately 90 employees between both the commercial space and senior living facility are assumed to be generated. The expected number of new jobs that would be generated by the proposed project would contribute 0.07% to the projected Santa Clarita Valley employment growth of 128,850 new jobs between 2010 and 2030 as established in the One Valley One Vision General Plan, meaning the number of new jobs generated by the project is well within the Santa Clarita Valley's employment growth projections (see Section 4.13 for more details). It is assumed that the alternative would result in less employment growth given that the proposed project includes 8,914 square feet of commercial space and 277,108 square feet

of senior living. As a result, less than significant impacts are anticipated under Alternative 3. Therefore, impacts related to population and housing would be **less than** the proposed project.

Public Services

As discussed in Section 4.14, Public Services, of this Draft EIR, impacts related to police, fire, schools, parks, and other public services (libraries) would be less than significant, and no mitigation is required.

Under Alternative 3, less population growth is anticipated when compared to the proposed project (see the discussion above regarding population and housing). Given this, the alternative is anticipated to generate less demand for police, fire, schools, parks, and other public services (libraries) when compared to the proposed project. In addition, this alternative would result in a nominal contribution to employment projections, and impacts are anticipated to remain less than significant. Therefore, impacts under Alternative 3 would be **less than** the proposed project.

Recreation

As discussed in Section 4.15, Recreation, of this Draft EIR, impacts related to recreation would be less than significant with implementation of all mitigation measures required for all other environmental issue areas. The proposed project includes recreational components, which would result in construction and operational impacts. The construction noise impacts would be temporary in nature and attributed to the entire project, not just the recreational component.

Under Alternative 3, recreational amenities are proposed throughout the project site. Given this, Alternative 3 would not increase in the use of existing neighborhood and regional parks or other recreational facilities. Instead, the construction and operation of this alternative may result in adverse physical effect on environment, the impacts of which are discussed throughout this section. Therefore, impacts as a result of Alternative 3 would be less than the proposed project.

Transportation

As discussed in Section 4.16, Transportation, of this EIR, the proposed project would generate approximately 3,696 ADT, with 210 trips occurring during the AM peak hour and 307 trips occurring during the PM peak hour before accounting for the internal capture of trips between uses and existing trips currently passing by the project site. The vehicle miles traveled (VMT) analysis demonstrated that the proposed project's VMT per resident and VMT per employee are below the threshold, and would result in a less than significant impacts. Moreover, no hazardous geometric design features would be part of the project's roadway improvements and the project would not result in inadequate emergency access. Therefore, impacts would be less than significant.

Under Alternative 3, similar less-than-significant impacts would occur relative to geometric design features and emergency access. The proposed design under this alternative is similar to the proposed project, in which the same off-site street improvements are proposed as the proposed project. Table 6-5 compares the trip generation of the proposed project with Alternative 3. As shown, Alternative 3 is expected to generate approximately 1,053 average daily trips, or 2,435 fewer vehicle trips when compared to the proposed project. Given this, the impacts associated with Alternative 3 are anticipated to be **less than** the proposed project.

Table 6-5. Alternative 3 vs. Proposed Project Trip Generation Comparison

Land Use	Amount	Units	Average Daily Trips
Proposed Project			
Multifamily Housing Low-Rise (220)	379	DU	2,554
Commercial Shopping Center	8.9	TSF	606
Senior Living Facilities/CCRC	217	Units	536
	Tota	al Gross Trips	3,696
	Total I	3,548	
Net New External Tr	ips (Total Prop	osed Project)	3,488
Alternative 3			
Soccer/Baseball/Football Fields	3.0	Fields	214
Tennis Courts/Pickle Ball Courts	15.0	Courts	303
Restaurant	10.0	TSF	1,072
Restaurant Internal Capture (50%)			-536
Total Alternative 3 Trips			1,053
Comparison between Alternative 3 and Proposed Project			-2,435

Source: Stantec 2023.

Utilities and Service Systems

As discussed in Section 4.18, Utilities and Service Systems, of this Draft EIR, impacts related to water, wastewater, solid waste, storm water, electricity, telecommunications, and natural gas would be less than significant, and no mitigation is required.

Under Alternative 3, a private recreational facility is proposed on the project site. Connections to utilities and service systems to the project site would remain. However, due to the decrease in population/employment generated when compared to the proposed project, demand for potable water, electric power, natural gas, and telecommunications is anticipated to also decrease. Similarly, a decrease in the generation of solid waste and wastewater is expected. The City's General Plan anticipated the residential land use proposed under this alternative. As such, Alternative 3 is consistent with the land use designation and zoning. Given this, infrastructure planning for the project site considered the potential development of this alternative. Therefore, impacts are anticipated to remain less than significant. However, impacts as a result of Alternative 3 would be less than the proposed project.

Wildfire

As discussed in Section 4.19, with implementation of mitigation measures MM-FIRE-1 through MM-FIRE-3, potential impacts associated with wildfires would be less than significant.

Under Alternative 3, a private recreational facility is proposed on the project site. As detailed in Section 4.19 of this EIR, the project site lies within an area considered a VHFHSZ within the LRA as designated by CAL FIRE and the Los Angeles County Fire Department. There is also an expansive area of VHFHSZ SRA west of the project site on the other side of I-5 freeway. Given the existing conditions, mitigation measures MM-FIRE-1 through MM-FIRE-3 would be required to reduce impacts to less-than-significant levels. Therefore, impacts related to wildfire under Alternative 3 would be **similar to** the proposed project.

6.4.3.2 Relationship to Project Objectives

Under Alternative 4, a private recreational facility, including a 10,000 square foot clubhouse/restaurant, are proposed on the project site. As shown in Figure 6-2, Alternative 3 Site Plan, development under this alternative would consist of eight tennis courts, seven pickleball courts, a soccer field, a football field, baseball field and outdoor basketball court. Table 6-6 provides a list of the project objectives and whether Alternative 4 meets each objective.

Table 6-6. Summary of Alternative 3 Success at Meeting Project Objectives

Project Objective		Alternative Meets Objective?
1.	Create a new mixed-use community that allows for residential, retail/commercial, and senior housing while preserving and enhancing natural resources.	No. Under Alternative 3, a private recreational facility, including a 10,000 square foot clubhouse/restaurant, are proposed on the project site. This alternative would not develop mixed-use community. As such, Alternative 2 would not meet this objective.
2.	Provide a sensitive and protective interface with the adjacent Wiley Canyon Creek by utilizing appropriate setback, grading, landscape, buried bank stabilization and water quality treatments.	Yes. Under Alternative 3, a 5-foot earth berm would be constructed on the site's western border along the Wiley Canyon Creek (also referred to as the South Fork of the Santa Clara River). Setbacks, grading, and landscaping would be the same as the proposed project. As shown in Figure 6-2, Alternative 3 Site Plan, a water quality basin is proposed on north portion of the site and a drainage basin is proposed to the south. As such, Alternative 3 would meet this objective.
3.	Provide development and transitional land use patterns that are compatible with surrounding communities and land uses and are consistent with the City's General Plan.	Yes. Alternative 3 would redevelop the vacant project site into a private recreational facility. Although recreational facilities are not within the surrounding project site vicinity, commercial-like land uses are complimentary to the south of the site. Given this, Alternative 3 would meet this objective.
4.	Arrange land uses and add amenities to reduce vehicle miles traveled and to encourage the use of transit.	Partially Yes. Alternative 3 would not result in the same recreational amenities as the proposed project. However, this alternative result in fewer vehicle trips as compared to the proposed project. Given this, Alternative 3 would partially meet this objective.
5.	Design neighborhoods to locate residential and non-residential land uses in close proximity to each other and major road corridors, transit and trails.	Yes. See discussion for Objective No. 3.
6.	Provide public spaces, including plazas, private and public recreational areas and trails.	Partially Yes. Alternative 3 would include private recreational uses on site. However, the alternative is proposed to be a private recreational facility. Given this, Alternative 3 would partially meet this objective.
7.	Implement waste reduction, drought-tolerant landscaping, and use of water efficiency measures.	Yes. Alternative 3 would be required to comply with all applicable landscaping and water efficiency measures under the City's Municipal Code. Given this, Alternative 3 would meet this objective.

Table 6-6. Summary of Alternative 3 Success at Meeting Project Objectives

Proje	ect Objective	Alternative Meets Objective?
8.	Provide a meandering trail with public access along Wiley Canyon Road and within the project site along Wiley Canyon Creek.	Yes. Under Alternative 3, similar improvements along the South Fork of the Santa Clara River (i.e., Wiley Canyon Creek) is proposed. Given this, Alternative 3 would meet this objective.
9.	Provide a landscape design emphasizing a pleasant neighborhood character and inviting streetscapes.	Yes. See similar discussion under Objective No. 7.
10.	Enhance and augment the City's housing market by providing a variety of housing product to meet the needs of future residents.	No. Under Alternative 3, housing is not proposed on the project site. Given this, Alternative 3 would not meet this objective.
11.	Maintain and enhance the use of Wiley Canyon Creek with native revegetation as a to serve as a natural channel to be utilized by wildlife.	Yes. See similar discussion under Objective No. 8.
12.	Incorporate new oak trees into the project design, including public spaces.	Yes. See similar discussion under Objective No. 7.
13.	Incorporate vehicle and pedestrian circulation improvements on Wiley Canyon Road and Calgrove Boulevard through the widening of the roadways where needed, as well as the addition of appropriate traffic controls at various intersections.	Yes. Under Alternative 3, similar improvements along Wiley Canyon Road are proposed as shown in Figure 6-2. Given this, Alternative 3 would meet this objective.
14.	Provide a Class I trail and sidewalks along the roadways.	Yes. See similar discussion under Objective No. 8.
15.	Provide publicly accessible passive and active recreational opportunities for prospective residents and existing residents in proximity to the project site.	Partially Yes. See similar discussion under Objective No. 4.
16.	Include amenities to specifically support senior residents requiring senior services including memory care, supporting amenities for basic-needs nursing care, and housekeeping service.	No. Alternative 3 does not include senior living residential on the project site. As such, this alternative would not meet this objective.
17.	Include recreational amenities to improve quality of life of prospective on-site residents and existing off-site residents and encourage senior living tenants to socialize and maintain active lifestyles.	Partially Yes. See similar discussion under Objective No. 4 and Objective No. 16.

6.4.4 Alternative 4 - Construction Noise Setback Alternative

This alternative includes development of the site with a 139-bed assisted living facility, 47 detached condos, and 237 apartment units. The proposed senior living facility would be 3-stories in height and the multifamily apartments would range from 2- and 4-stories. Under Alternative 4, a 200-foot open space/landscaped buffer is proposed between the mobile home park to the north and the project site. This alternative would include

development of the recreational building and pool located in the center of the project site surrounded by the proposed apartment buildings. In addition, recreational/ open space uses are proposed on the southern portion of the site. As shown in Figure 6-3, Alternative 4 Site Plan, the infrastructure improvements, including the northern water quality basin and the southern drainage basin on site are proposed under this alternative as well as off-site street improvements along Wiley Canyon Road and its intersecting streets.

6.4.4.1 Environmental Impact Analysis

Aesthetics

As discussed in Section 4.1, Aesthetics, of this EIR, implementation of the proposed project would result in less-than-significant scenic vista, scenic resources, visual character, and nighttime light and glare impacts. No mitigation measures are required.

Under Alternative 4, multifamily residential and senior living land uses are proposed on the project site, similar to the proposed project. As shown in Figure 6-3, Alternative 4 Site Plan, the proposed apartment buildings would range from 2- and 4-stories in height. The proposed senior living facility is proposed at 3-stories in height. Publicly accessible views from Wiley Canyon Road would be limited from the proposed berm and the 200-foot landscaped set back to the north of the site. Impacts related to scenic vistas and scenic resources within a state scenic highway would be the same as the proposed project. Moreover, the proposed land uses are permitted on the project site and subject to the same regulations governing scenic quality, lighting and glare as the proposed project. Therefore, impacts related to aesthetics under Alternative 4 would be **similar to** the proposed project.

Air Quality

As discussed in Section 4.2, Air Quality, of this EIR, implementation of the proposed project would not result in conflicts with an adopted air quality management plan, would not exceed established thresholds for criteria air pollutants during construction or operation, and, with implementation of mitigation (MM-AQ-1), would not expose sensitive receptors to pollutant concentrations during construction. All air quality impacts can be mitigated to a less-than-significant level.

Under Alternative 4, construction and operational activities are anticipated to be similar to the proposed project. The proposed land uses on site under this alternative are allowed under the City's General Plan and zoning designation. As such, implementation of Alternative 4 would not result in a conflict with the AQMP. Construction of Alternative 4 would require similar equipment and activities as the proposed project. Given this, it is anticipated mitigation would be required to reduce mobile source emissions, such as NOx, which are generated from the use of construction equipment such as dozers and loaders. Similar to the proposed project, MM-AQ-1 would be required to reduce impacts to less-than-significant levels. Additionally, with similar construction activities, Alternative 4 is anticipated to require mitigation (i.e., MM-AQ-1) to reduce construction-related toxic air contaminants to less-than-significant levels. However, the scale of the proposed development under this alternative is less in comparison to the proposed project. Therefore, air quality impacts under Alternative 4 would be less than the proposed project.

Biological Resources

As discussed in Section 4.3, Biological Resources, of this EIR, with implementation of mitigation measures MM-BIO-1 through MM-BIO-3, impacts to special-status wildlife species (e.g., least Bell's vireo, Cooper's hawk)

would be less than significant. Similarly, with implementation of mitigation measure MM-BIO-4, impacts to riparian and sensitive plant communities to less than significant. MM-BIO-5 would reduce impacts to protected waters to less than significant.

Under Alternative 4, a reduced development footprint is proposed when compared to the proposed project. However, the potential impacts associated with the South Fork of the Santa Clara River would remain under this alternative. Therefore, all impacts related to biological resources under the proposed project would occur under Alternative 4 and mitigation measures MM-BIO-1 through MM-BIO-5 would be necessary to reduce impacts to less-than-significant levels. Therefore, impacts to biological resources under Alternative 4 would be **similar to** the proposed project.

Cultural and Tribal Cultural Resources

As discussed in Section 4.4, Cultural Resources, of this EIR, impacts to historical resources and archaeological resources would be less than significant with the implementation of mitigation measures MM-CUL-1, MM-CUL-2, MM-CUL-3, and MM-CUL-4. Similarly, impacts to human remains would be less than significant with mitigation measure MM-CUL-5 incorporated.

As discussed in Section 4.17, Tribal Cultural Resources, of this EIR, impacts to tribal cultural resources would be less than significant with implementation of mitigation.

Under Alternative 4, a reduced development footprint is proposed when compared to the proposed project. However, as detailed in Section 4.4, there is potential for unknown cultural resources to be encountered during project implementation on the project site. As such, all impacts related to cultural resources under the proposed project would occur under this alternative. Mitigation measures MM-CUL-1 through MM-CUL-5 would be necessary to reduce impacts to less-than-significant levels. Therefore, impacts to cultural resources under Alternative 4 would be **similar to** the proposed project.

Energy

As discussed in Section 4.5, Energy, of this EIR, energy impacts associated with the proposed project would be less than significant, and no mitigation is required.

Under Alternative 4, it is anticipated that the land use mix proposed would result in slightly less energy use during construction and operation when compared to the proposed project. Similar to the proposed project, this alternative would be required to comply with applicable regulations governing energy efficiency. As such, it is anticipated Alternative 4 would result in a less than significant impact regarding wasteful, inefficient, or unnecessary consumption of energy resources. Additionally, Alternative 4 would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency and would result in a less than significant impact, consistent with the Project. Therefore, energy-related impacts under Alternative 4 would be **less than** the proposed project.

Geology and Soils

As discussed in Section 4.6, Geology and Soils, of this EIR, impacts related to geology and soils were found to be less than significant without mitigation. However, given that there are fossil localities nearby the project site from

the same sedimentary deposits that occur on site, mitigation (MM-GEO-1 through MM-GEO-4) was required to reduce impacts to paleontological resources to less-than-significant levels.

Under Alternative 4, a reduced development footprint is proposed when compared to the proposed project. Compliance building code regulations would reduce impacts related to geology and soils, consistent with the proposed project. However, given the project site's sensitivity for fossil localities nearby, MM-GEO-1 through MM-GEO-4 would be required under Alternative 4 to reduce impacts to less than significant. Therefore, it is likely that impacts related to geology and soils under Alternative 4 would be the same as the proposed project.

Greenhouse Gas Emissions

As discussed in Section 4.7, Greenhouse Gas Emissions, of this EIR, all GHG emission impacts would be less than significant, and no mitigation is required.

Under Alternative 4, the construction scenario would be slightly less than to the proposed project and generate less construction-related GHG emissions. During operations, a reduction in vehicle trips is anticipated as a result of Alternative 4. Given this, GHG impacts under Alternative 4 are anticipated to be **less than** the proposed project.

Hazards and Hazardous Materials

As discussed in Section 4.8, Hazards and Hazardous Materials, of this EIR, potential impacts associated with hazards and hazardous materials would be less than significant. However, there is the potential for impacts associated with the potential exposure of people or structures to risk of loss, injury, or death involving wildland fires. With implementation of mitigation measures MM-FIRE-1 through MM-FIRE-3, impacts would be reduced to less-than-significant levels.

Under Alternative 4, a reduced development footprint is proposed when compared to the proposed project. Impacts related to hazards and hazardous materials are anticipated to be the same as the proposed project. Additionally, mitigation measures MM-FIRE-1 through MM-FIRE-3 would be required under this alternative to reduce site-specific impacts associated with the potential exposure of people or structures to risk of loss, injury, or death involving wildland fires. Given this, impacts related to hazards and hazardous materials under Alternative 4 would be **the same as** the proposed project.

Hydrology and Water Quality

As discussed in Section 4.9, Hydrology and Water Quality, of this EIR, impacts related hydrology and water quality would be less than significant. However, impacts related to the project's potential to impede or redirect flood flows would be less than significant with the incorporation of MM-HYD-1. Similarly, impacts related to flood hazards would require implementation of MM-HYD-1 to reduce to less-than-significant levels.

Under Alternative 4, a reduced development footprint is proposed when compared to the proposed project. The alternative would require the same on- and off-site improvements to the South Fork of the Santa Clara River. As such, impacts related to flood hazards would require implementation of MM-HYD-1 to reduce to less-than-significant levels under Alternative 4. Given this, impacts related to hydrology and water quality under Alternative 4 would be **the same as** the proposed project.

Land Use and Planning

As discussed in Section 4.10, Land Use and Planning, of this EIR, land use and planning impacts would be potentially significant associated with the impacts outlined throughout this EIR (i.e., MM-AQ-1, MM-BIO-1 through MM-BIO-5, MM-HYD-1, MM-NOI-1 and MM-NOI-2, and MM-FIRE-1 through MM-FIRE-3). As such, in order to ensure consistency between the proposed project and applicable land use plans, policies, and regulations that have been adopted for the purpose of avoiding or mitigating an environmental effect to the maximum extent feasible, mitigation measures have been incorporated to reduce impacts to less-than-significant levels.

Under Alternative 4, a reduced development footprint is proposed when compared to the proposed project. Moreover, the proposed land uses on site under this alternative are allowed under the City's General Plan and zoning designation. Therefore, similar to the proposed project, mitigation measures identified throughout the Draft EIR would be incorporated to reduce impacts to less-than-significant levels. Given this, impacts related to land use and planning under Alternative 4 would be **the same as** the proposed project.

Mineral Resources

As discussed in Section 4.11, Mineral Resources, of this EIR, impacts would be less than significant due to the lack of any known significant mineral resources.

Under Alternative 4, a reduced development footprint is proposed when compared to the proposed project. Mineral extraction activities do not occur on site under existing conditions. As such, Alternative 4 would not result in the loss of availability of a known mineral resource. Site-specific impacts to mineral resources under Alternative 4 would be **the same as** the proposed project.

Noise

As discussed in Section 4.12, Noise, of this EIR, construction noise and construction vibration would result in significant impacts that cannot be mitigated to a less-than-significant level. However, these impacts would be short-term and limited to construction activities. The project would result in significant and unavoidable impacts related to construction noise even with the incorporation of mitigation measures MM-NOI-1 and MM-NOI-2. Similarly, the project would result in cumulatively considerable construction noise impacts. In particular, a significant impact would occur as a result of a temporary exceedance in the ambient noise thresholds during construction, as well as an exceedance in significance thresholds related to the proposed Senior Living residences on site. Operational noise and vibration impacts associated specifically with the project would be less than significant and would not require mitigation.

Under Alternative 4, a reduced development footprint is proposed when compared to the proposed project. Moreover, this alternative includes a 200-foot open space/landscaped buffer between the existing mobile home park to the north and the project site to reduce a noise impacts during construction. As such, it is anticipated that construction-related impacts would be reduced. Additionally, under this alternative, MM-NOI-1 and MM-NOI-2 would be incorporated to reduce impacts. As detailed in Section 4.12 of this EIR, significant noise-related impacts would occur during construction due to proximity of the existing noise-sensitive receptors to the north of the project site. Under Alternative 4, the undeveloped buffer area would limit construction activities from occurring in this area, thereby reducing noise impacts. As such, impacts related to noise and vibration would be **less than** the proposed project under Alternative 4.

Population and Housing

As discussed in Section 4.13, Population and Housing, impacts related to population and housing would be less than significant, and no mitigation is required. The proposed project does not include the displacement of any people, housing, or businesses, nor would the proposed development induce population growth. Construction employment at the project site is not anticipated to generate population growth in the City. During operation, total employment is estimated to be filled by City residents or by residents of neighboring cities or communities.

Under Alternative 4, a 139-bed assisted living facility, 47 detached condos, and 237 apartment units are proposed on the project site. Utilizing the City's average persons per household of 3.08 (as identified in Section 4.13 of this EIR), this alternative is anticipated to result in approximately 875 residents.^{2,3} Accordingly, the population projections under Alternative 4 would be less than the 1,371 residents anticipated under the proposed project. The alternative would result in a reduced housing and population growth when compared to the proposed project. Moreover, the additional units and associated residents would result in a nominal contribution to the City and Santa Clarita Valley's projected population of 485,000 by 2030. Less than significant impacts are anticipated under Alternative 4. Therefore, impacts related to population and housing would be **less than** the proposed project.

Public Services

As discussed in Section 4.14, Public Services, of this Draft EIR, impacts related to police, fire, schools, parks, and other public services (libraries) would be less than significant, and no mitigation is required.

Under Alternative 4, less population growth is anticipated when compared to the proposed project (see the discussion above regarding population and housing). Given this, the alternative is anticipated to generate less demand for police, fire, schools, parks, and other public services (libraries) when compared to the proposed project. In addition, this alternative would result in a nominal contribution to population projections, and impacts are anticipated to remain less than significant. Therefore, impacts under Alternative 4 would be **less than** the proposed project.

Recreation

As discussed in Section 4.15, Recreation, of this Draft EIR, impacts related to recreation would be less than significant with implementation of all mitigation measures required for all other environmental issue areas. The proposed project includes recreational components, which would result in construction and operational impacts. The construction noise impacts would be temporary in nature and attributed to the entire project, not just the recreational component.

Under Alternative 4, recreational amenities are proposed, similar to the proposed project. Given this and the anticipated reduction in population under this alternative, an increase in the use of existing neighborhood and regional parks or other recreational facilities would likely be reduced in comparison to the proposed project. Therefore, impacts as a result of Alternative 4 would be **less than** the proposed project.

^{(237+47)*3.08 = 874.72} or 875 (rounded to the nearest whole person)

³ Similar to Section 4.13, Population and Housing, for the purposes of this analysis, the living spaces associated with the senior care facility are not considered new housing units because they are components of the senior care facility and are not accessible to all members of the public.

Transportation

As discussed in Section 4.16, Transportation, of this EIR, the proposed project would generate approximately 3,696 ADT, with 210 trips occurring during the AM peak hour and 307 trips occurring during the PM peak hour before accounting for the internal capture of trips between uses and existing trips currently passing by the project site. The vehicle miles traveled (VMT) analysis demonstrated that the proposed project's VMT per resident and VMT per employee are below the threshold, and would result in a less than significant impacts. Moreover, no hazardous geometric design features would be part of the project's roadway improvements and the project would not result in inadequate emergency access. Therefore, impacts would be less than significant.

Under Alternative 4, similar less-than-significant impacts would occur relative to geometric design features and emergency access. The proposed design under this alternative is similar to the proposed project, in which the same off-site street improvements are proposed as the proposed project. Table 6-7 compares the trip generation of the proposed project with Alternative 4. As shown, Alternative 4 is expected to generate approximately 2,275 average daily trips, or 1,213 fewer vehicle trips when compared to the proposed project. Given this, the impacts associated with Alternative 4 are anticipated to be **less than** the proposed project.

Table 6-7. Alternative 4 vs. Proposed Project Trip Generation Comparison

Land Use	Amount	Units	Average Daily Trips
Proposed Project			
Multifamily Housing Low-Rise (220)	379	DU	2,554
Commercial Shopping Center	8.9	TSF	606
Senior Living Facilities/CCRC	217	Units	536
	3,696		
	3,548		
Net New External Trips	3,488		
Alternative 4			
Assisted Living	139	Beds	361
Detached Condos (Multifamily Low-Rise)	317		
Apartment Units (Multifamily Low-Rise)	1,597		
	2,275		
Comparison between Alternative 4 and Proposed Project			-1,213

Source: Stantec 2023.

Utilities and Service Systems

As discussed in Section 4.18, Utilities and Service Systems, of this Draft EIR, impacts related to water, wastewater, solid waste, storm water, electricity, telecommunications, and natural gas would be less than significant, and no mitigation is required.

Under Alternative 4, a reduced development footprint is proposed when compared to the proposed project. Connections to utilities and service systems to the project site would remain. However, due to the potential decrease in population generated as a result of 47 detached condos and 237 apartment units, a decrease in demand for potable water, electric power, natural gas, and telecommunications is anticipated. Similarly, a decrease in the generation of solid waste and wastewater is expected. The City's General Plan anticipated the

residential land use proposed under this alternative. As such, Alternative 4 is consistent with the land use designation and zoning. Given this, infrastructure planning for the project site considered the potential development of this alternative. Therefore, impacts are anticipated to remain less than significant. However, impacts as a result of Alternative 4 would be **less than** the proposed project.

Wildfire

As discussed in Section 4.19, with implementation of mitigation measures MM-FIRE-1 through MM-FIRE-3, potential impacts associated with wildfires would be less than significant.

Under Alternative 4, a reduced development footprint is proposed when compared to the proposed project. As detailed in Section 4.19 of this EIR, the project site lies within an area considered a VHFHSZ within the LRA as designated by CAL FIRE and the Los Angeles County Fire Department. There is also an expansive area of VHFHSZ SRA west of the project site on the other side of I-5 freeway. Given the existing conditions, mitigation measures MM-FIRE-1 through MM-FIRE-3 would be required to reduce impacts to less-than-significant levels. Therefore, impacts related to wildfire under Alternative 3 would be **similar to** the proposed project.

6.4.4.2 Relationship to Project Objectives

Under Alternative 4, 139-bed assisted living facility, 47 detached condos, and 237 apartment units are proposed on the project site. As shown in Figure 6-3, Alternative 4 Site Plan, a 200-foot open space/landscaped buffer is proposed between the mobile home park to the north and the project site. This alternative would include development of the recreational building and pool located in the center of the project site surrounded by the proposed apartment buildings. In addition, recreational/ open space uses are proposed on the southern portion of the site. Table 6-8 provides a list of the project objectives and whether Alternative 4 meets each objective.

Table 6-8. Summary of Alternative 4 Success at Meeting Project Objectives

Project Objective		Alternative Meets Objective?		
1.	Create a new mixed-use community that allows for residential, retail/commercial, and senior housing while preserving and enhancing natural resources.	Partially Yes. Under Alternative 4, only multifamily residential and a senior living facility is proposed on site. Retail is not proposed under this alternative. Similar to the proposed project, the alternative would not develop Lot 6 of the project site and keep the land as open space. As such, Alternative 4 would partially meet this objective.		
2.	Provide a sensitive and protective interface with the adjacent Wiley Canyon Creek by utilizing appropriate setback, grading, landscape, buried bank stabilization and water quality treatments.	Yes. Under Alternative 4, an earth berm would be constructed on the site's western border along the Wiley Canyon Creek (also referred to as the South Fork of the Santa Clara River). Setbacks, grading, and landscaping would be the same as the proposed project. As shown in Figure 6-3, Alternative 4 Site Plan, a water quality basin is proposed on north portion of the site and a drainage basin is proposed to the south. As such, Alternative 4 would meet this objective.		
3.	Provide development and transitional land use patterns that are compatible with surrounding communities and land uses and are consistent with the City's General Plan.	Yes. Alternative 4 is an allowable use under the City's General Plan and zoning designation Mixed Use – Neighborhood (MX-N) with a Planned Development Overlay (PD). As such, Alternative 4 would meet this objective.		

Table 6-8. Summary of Alternative 4 Success at Meeting Project Objectives

Proi	ect Objective	Alternative Meets Objective?
	Arrange land uses and add amenities to reduce vehicle miles traveled and to encourage the use of transit.	Yes. Alternative 4 would include similar recreational amenities as the proposed project on site with the proposed residential land uses. Given this, Alternative 4 would meet this objective.
5.	Design neighborhoods to locate residential and non-residential land uses in close proximity to each other and major road corridors, transit and trails.	Yes. The proposed land uses under Alternative 4 would be primarily residential on the project site. Given this, the alternative would result in residential land use in close proximity to surrounding residential land uses. As such, Alternative 4 would meet this objective.
6.	Provide public spaces, including plazas, private and public recreational areas and trails.	Yes. Alternative 4 would include public and private recreational uses on site for residents and visitors. Given this, Alternative 4 would meet this objective.
7.	Implement waste reduction, drought-tolerant landscaping, and use of water efficiency measures.	Yes. Alternative 4 would be required to comply with all applicable landscaping and water efficiency measures under the City's Municipal Code. In addition, this alternative includes a 200-foot landscaped area on the northern portion of the site. For these reasons, Alternative 4 would meet this objective.
8.	Provide a meandering trail with public access along Wiley Canyon Road and within the project site along Wiley Canyon Creek.	Yes. Under Alternative 4, similar improvements along the South Fork of the Santa Clara River (i.e., Wiley Canyon Creek) is proposed. Given this, Alternative 4 would meet this objective.
9.	Provide a landscape design emphasizing a pleasant neighborhood character and inviting streetscapes.	Yes. See similar discussion under Objective No. 7.
10	Enhance and augment the City's housing market by providing a variety of housing product to meet the needs of future residents.	Yes. Under Alternative 4, 47 detached condos and 237 apartment units are proposed on the project site, in addition to a 139-bed assisted living facility. Given this, Alternative 4 would meet this objective.
11	. Maintain and enhance the use of Wiley Canyon Creek with native revegetation as a to serve as a natural channel to be utilized by wildlife.	Yes. See similar discussion under Objective No. 8.
12	. Incorporate new oak trees into the project design, including public spaces.	Yes. See similar discussion under Objective No. 7.
13	Incorporate vehicle and pedestrian circulation improvements on Wiley Canyon Road and Calgrove Boulevard through the widening of the roadways where needed, as well as the addition of appropriate traffic controls at various intersections.	Yes. Under Alternative 4, similar improvements along Wiley Canyon Road are proposed as shown in Figure 6-3. Given this, Alternative 4 would meet this objective.
14	. Provide a Class I trail and sidewalks along the roadways.	Yes. See similar discussion under Objective No. 8.
15	Provide publicly accessible passive and active recreational opportunities for prospective residents and existing residents in proximity to the project site.	Yes. See similar discussion under Objective No. 4.

Table 6-8. Summary of Alternative 4 Success at Meeting Project Objectives

Project Objective	Alternative Meets Objective?
16. Include amenities to specifically support senior residents requiring senior services including memory care, supporting amenities for basic-needs nursing care, and housekeeping service.	Yes. Alternative 4 would include a 139-bed assisted living residential facility on the project site. As such, this alternative would meet this objective.
17. Include recreational amenities to improve quality of life of prospective on-site residents and existing off-site residents and encourage senior living tenants to socialize and maintain active lifestyles.	Yes. See similar discussion under Objective No. 4 and Objective No. 16.

6.5 Evaluation of Alternatives

Pursuant to the CEQA Guidelines, as well as the project objectives, a range of alternatives to the project are considered and evaluated in this EIR. To summarize these project alternatives, as suggested in CEQA Guidelines Section 15126.6(d), a matrix was prepared to summarize and compare the impacts of each project alternative (Table 6-9).

Table 6-9. Comparison of Project and Alternatives Impacts

Environmental Issue Area	Proposed Project	Alternative 1 No Project/ No Build	Alternative 2 Affordable Housing Alternative	Alternative 3 Private Recreational Facility Alternative	Alternative 4 Construction Noise Setback Alternative
Aesthetics	Less than Significant	▼	=	A	=
Air Quality	Less than Significant with Mitigation	▼	=	▼	▼
Biological Resources	Less than Significant with Mitigation	▼	=	=	=
Cultural Resources	Less than Significant	•	=	=	=
Energy	Less than Significant	•	=	•	▼
Geology and Soils	Less than Significant with Mitigation	▼	=	=	=
Greenhouse Gas Emissions	Less than Significant	•	A	•	▼
Hazards and Hazardous Materials	Less than Significant with Mitigation	▼	=	=	=

Table 6-9. Comparison of Project and Alternatives Impacts

Environmental Issue Area	Proposed Project	Alternative 1 No Project/ No Build	Alternative 2 Affordable Housing Alternative	Alternative 3 Private Recreational Facility Alternative	Alternative 4 Construction Noise Setback Alternative
Hydrology and Water Quality	Less than Significant with Mitigation	▼	=	=	=
Land Use and Planning	Less than Significant with Mitigation	▼	=	=	=
Mineral Resources	Less than Significant	•	=	=	=
Noise	Significant and Unavoidable (construction and cumulative construction)	▼ (Eliminate)	=	=	▼ (Eliminate)
Population and Housing	Less than Significant	▼	A	▼	•
Public Services	Less than Significant	•	A	▼	•
Recreation	Less than Significant with Mitigation	▼	A	▼	V
Transportation	Less than Significant	•	A	▼	•
Tribal Cultural Resources	Less than Significant with Mitigation	▼	=	=	=
Utilities and Service Systems	Less than Significant	▼	A	▼	•
Wildfire	Less than Significant with Mitigation	•	=	=	=

Notes: = = Alternative is likely to result in similar impacts to issue when compared to project; ▼ = Alternative is likely to result in reduced impacts to issue when compared to project; ▲ = Alternative is likely to result in greater impacts to issue when compared to project.

In summary, Alternative 1 would result in no development on site. Consequently, all impacts would be less than the proposed project. Under Alternative 2, impacts would be greater than the proposed project for the following environmental topic areas: greenhouse gas emissions, population and housing, public services, recreation, transportation, and utilities and service systems. Other than those identified to be greater than the proposed project, Alternative 2 would generally result in similar impacts as the proposed project. Under Alternative 3, impacts related to aesthetics would be greater than the proposed project. However, noise impacts under Alternative 3, similar to the proposed project. Under Alternative 4, the significant construction noise impacts would be eliminated. Of note, impacts related to agriculture and forestry resources were found to be less than significant under the proposed project (see Chapter 5, Other CEQA Considerations, of this EIR). As such, a

comparison of the alternatives was not considered given an analysis of the project site's existing conditions, designations, and potential restrictions (i.e., Williamson Act).

As shown in the table above, the proposed project would result in one significant and unavoidable impact related to construction noise. Alternatives 1 and 4 would eliminate the significant impact. Alternatives 2 and 3 would require the implementation of mitigation measures; however, impacts would be reduced to a less-than-significant level. All other environmental topic areas were evaluated and compared to the proposed project, in which a majority of the mitigation measures proposed within this EIR were incorporated into Alternatives 2 through 4.

Given the change in land use mix amongst the project alternatives, a trip generation analysis was prepared. In comparison to the proposed project's ADT, Alternative 2 would generate an additional 312 daily trips, Alternative 3 would generate 2,435 fewer daily trips, and Alternative 4 would generate 1,213 fewer daily trips. The additional 312 ADT generated by Alternative 1 is generally comparable to the amount of traffic estimated for the proposed project and would not represent a perceptible difference (Stantec 2023). Alternatives 2 and 3 each represent a reduction in vehicle traffic compared to the proposed project. As such, impactes related to air quality and GHG emissions either increased or decreased in correlation to the anticipated trip generation.

Furthermore, a comparison of the proposed project and alternatives ability to meet project objectives is shown in Table 6-10. As summarized below, Alternative 1 would not meet any of the project objectives. Alternatives 2 would not meet Objective No. 16, given that this alternative would not include amenities to specifically support senior residents. However, all other objectives were either met or partially met under Alternative 2. Alternative 3 would not meet Objective No. 1, 10, or 16 due to the proposed recreational facility would not include mixed uses, residential, or senior living. Alternative 4 would meet all the project objectives with the exception of partially meeting Objective No. 1 given that no retail/commercial is proposed.

Table 6-10. Comparison of Project and Alternatives Meeting Project Objectives

Pro	ject Objectives	Alternative 1 No Project/ No Build	Alternative 2 Affordable Housing Alternative	Alternative 3 Private Recreational Facility Alternative	Alternative 4 Construction Noise Setback Alternative
1	Create a new mixed-use community that allows for residential, retail/commercial, and senior housing while preserving and enhancing natural resources.	No	Partially Yes	No	Partially Yes
2	Provide a sensitive and protective interface with the adjacent Wiley Canyon Creek by utilizing appropriate setback, grading, landscape, buried bank stabilization and water quality treatments.	No	Yes	Yes	Yes

Table 6-10. Comparison of Project and Alternatives Meeting Project Objectives

	<u> </u>		<u> </u>		
_	ect Objectives	Alternative 1 No Project/ No Build	Alternative 2 Affordable Housing Alternative	Alternative 3 Private Recreational Facility Alternative	Alternative 4 Construction Noise Setback Alternative
3	Provide development and transitional land use patterns that are compatible with surrounding communities and land uses and are consistent with the City's General Plan.	No	Yes	Yes	Yes
4	Arrange land uses and add amenities to reduce vehicle miles traveled and to encourage the use of transit.	No	Partially Yes	Partially Yes	Yes
5	Design neighborhoods to locate residential and non-residential land uses in close proximity to each other and major road corridors, transit and trails.	No	Yes	Yes	Yes
6	Provide public spaces, including plazas, private and public recreational areas and trails.	No	Partially Yes	Partially Yes	Yes
7	Implement waste reduction, drought-tolerant landscaping, and use of water efficiency measures.	No	Yes	Yes	Yes
8	Provide a meandering trail with public access along Wiley Canyon Road and within the project site along Wiley Canyon Creek.	No	Yes	Yes	Yes
9	Provide a landscape design emphasizing a pleasant neighborhood character and inviting streetscapes.	No	Yes	Yes	Yes
10	Enhance and augment the City's housing market by providing a variety of housing product to meet the needs of future residents.	No	Yes	No	Yes
11	Maintain and enhance the use of Wiley Canyon Creek with native revegetation as a to serve as a natural channel to be utilized by wildlife.	No	Yes	Yes	Yes
12	Incorporate new oak trees into the project design, including public spaces.	No	Yes	Yes	Yes

Table 6-10. Comparison of Project and Alternatives Meeting Project Objectives

Proj	ect Objectives	Alternative 1 No Project/ No Build	Alternative 2 Affordable Housing Alternative	Alternative 3 Private Recreational Facility Alternative	Alternative 4 Construction Noise Setback Alternative
13	Incorporate vehicle and pedestrian circulation improvements on Wiley Canyon Road and Calgrove Boulevard through the widening of the roadways where needed, as well as the addition of appropriate traffic controls at various intersections.	No	Yes	Yes	Yes
14	Provide a Class I trail and sidewalks along the roadways.	No	Yes	Yes	Yes
15	Provide publicly accessible passive and active recreational opportunities for prospective residents and existing residents in proximity to the project site.	No	Partially Yes	Partially Yes	Yes
16	Include amenities to specifically support senior residents requiring senior services including memory care, supporting amenities for basic-needs nursing care, and housekeeping service.	No	No	No	Yes
17	Include recreational amenities to improve quality of life of prospective on-site residents and existing off-site residents and encourage senior living tenants to socialize and maintain active lifestyles.	No	Partially Yes	Partially Yes	Yes

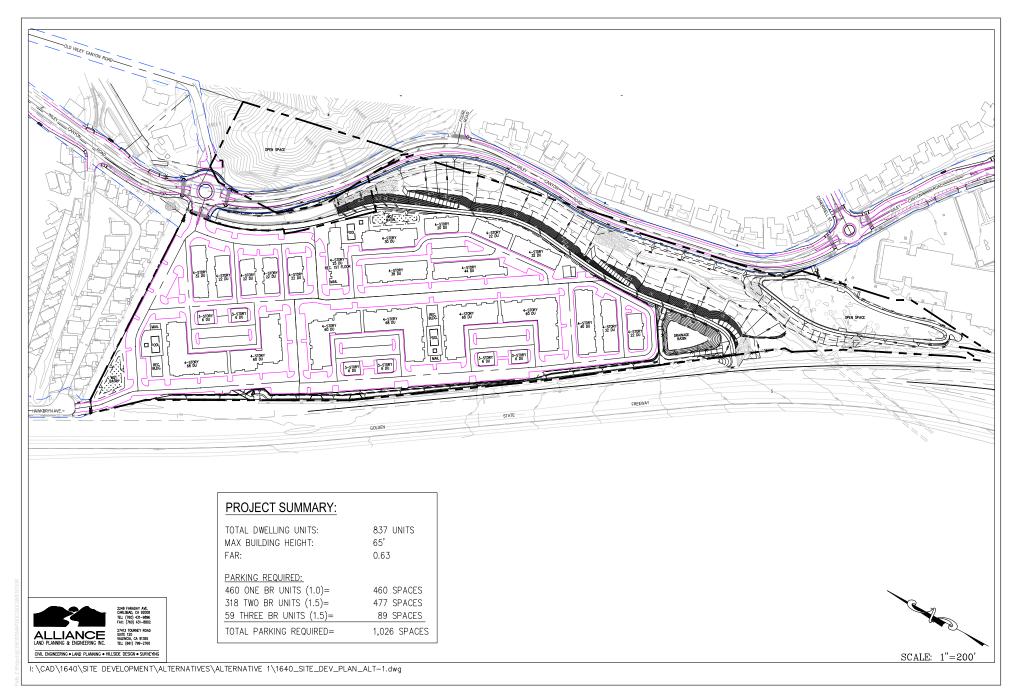
6.6 Environmentally Superior Alternative

As indicated in Table 6-9, Alternative 1, the No Project/No Build Alternative, would result in the least environmental impacts, and therefore would be considered the Environmentally Superior Alternative. However, CEQA Guidelines section 15126.6(e)(2) states that if the Environmentally Superior Alternative is the No Project Alternative, the EIR must also identify an Environmentally Superior Alternative among the other alternatives.

Of the remaining alternatives previously evaluated, Alternative 4 would eliminate the significant and unavoidable impact related to construction noise. When comparing project objectives, Alternative 4 would meet all the project objectives with the exception of partially meeting Objective No. 1 given that no retail/commercial is proposed. Therefore, Alternative 4 is identified as the environmentally superior alternative given that it would meet all project objectives.

6.7 References Cited

Stantec. 2023. Trip Generation Comparison for the Wiley Canyon Mixed-Use Project Alternatives. Prepared by Sandhya Perumalla and Daryl Zerfass PE, PTP. Stantec. Prepared for Wiley Canyon, LLC. November 20, 2023.

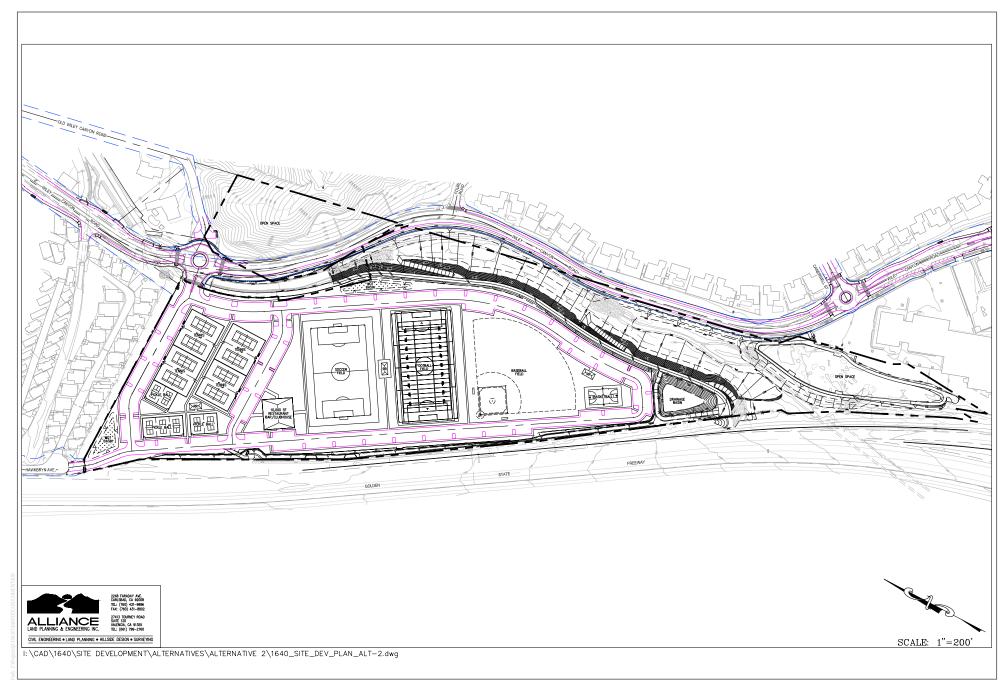


SOURCE: Alliance Land Planning & Engineering INC., 2024

DUDEK

FIGURE 6-1 Alternative 2 Site Plan

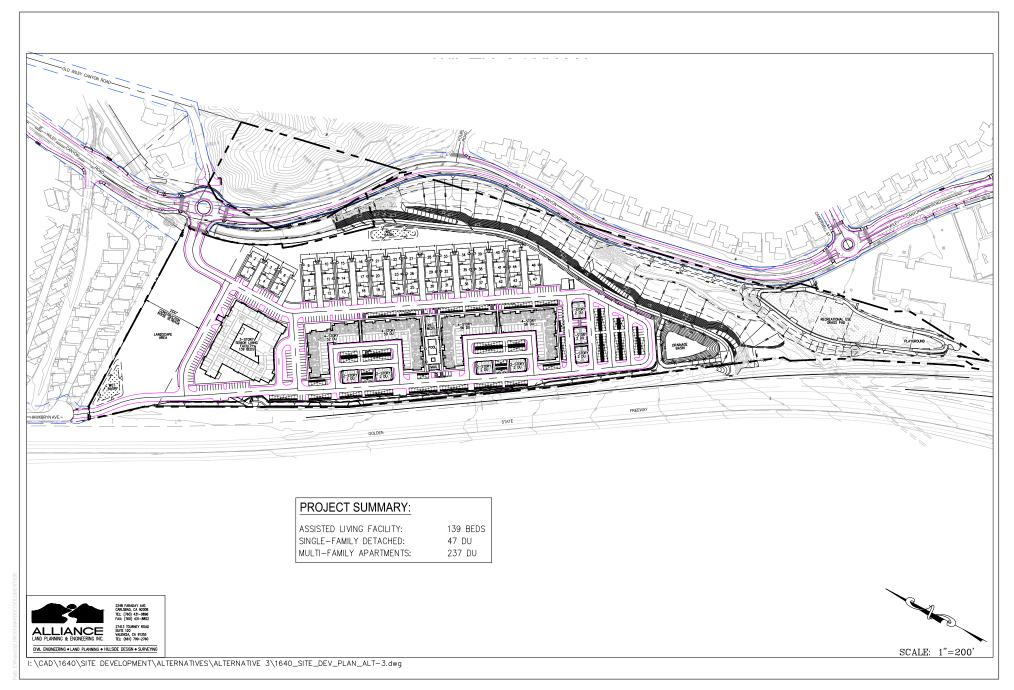
Wiley Canyon Project



SOURCE: Alliance Land Planning & Engineering INC., 2024

FIGURE 6-2 Alternative 3 Site Plan





SOURCE: Alliance Land Planning & Engineering INC., 2024

FIGURE 6-3 Alternative 4 Site Plan Wiley Canyon Project



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